



U.S. Fish & Wildlife Service

# Togiak

National Wildlife Refuge | Alaska

## PLANT LIST

### Togiak National Wildlife Refuge

This list is a compilation of collections plotted in Hulten's "Flora of Alaska and Neighboring Territories", a list of University of Alaska Museum herbarium specimens provided by the Northern Plant Documentation Center, and collections by Aaron Archibeque (A. Archibeque), Andy Aderman (A. Aderman), Rachel Budelsky (RB), Phil Caswell, Patrick Chubb (PC), Jennifer Culbertson (JC), Rob Doyle (RD), P. Greci (PG), Lisa Haggblom (LH), Stephens Harper (SH), Lauri Jemison (LJ), Heather Johnson (HJ), Rebecca Joyce (RJ), B. Kaplin (BK), Dr. William Kirk (WK), Kathryn Schubeck, Robb MacDonald (R. MacD.), John Moran (JM), Kellie Nolan (KN), Joshua Peirce (JP), and Alexander Wheeler (AW). The list includes information extracted from Matthew H. and Linda S. Dick's The Natural History of Cape Peirce and Nanvak Bay. In 1997 Dr. Rob Lipkin of the Alaska Natural Heritage Program provided a list of plants he recorded at Kagati Lake and Cape Newenham in 1993. This list has been incorporated.

HH Mount indicates a mounted specimen at the Hoysradt Herbarium, Hartwick College, Oneonta, New York. TNWR Mount indicates a mounted specimen at the Togiak National Wildlife Refuge, Dillingham, Alaska. UA Mount indicates a mounted specimen at the University of Alaska Museum Herbarium. UA Specimen indicates that a specimen has been provided to the herbarium, but has not yet been verified or entered into their computer.

Nomenclature follows "A Synonymized Checklist of the Vascular Flora of the United States, Canada, and Greenland, by John T. Kartesz. Subspecies, varieties and forms used in Hulten's "Flora of Alaska and Neighboring Territories" are listed for plants fitting their descriptions. Many of these taxa are currently considered taxonomically invalid, but are still useful in describing the characteristics of the plants encountered. There is a possibility that several may be considered taxonomically valid again.

As of 20 Apr 1997

### LYCOPODIACEAE (Club Moss Family)

Huperzia selago Bernh. ex Mart.& Schrank Fir Club Moss, Mountain Club Moss  
(Shown in Hulten as Lycopodium selago L.)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Pyramid Mountain, Cape Newenham, Cape Peirce, Nanavochtshak Lake, Kashaik Mountain, Ridge west of Sunshine Creek, High Lake, Heart Lake

UA Mounts of Huperzia selago (subspecies not listed):

Kagati Lake, P. Caswell, 15 Jun 92

Cape Peirce, L. Schandelmeier, 4 Jun 70

Cape Peirce, L. S. Dick, 14 May 73

Huperzia selago (L.) Bernh. ex Mart. & Schrank var. selago Fir Club Moss, Mountain Club Moss  
(Shown in Hulten as Lycopodium selago L. subsp. selago)

Kagati Lake, Kanektok River (RM49), Nimgun Lake, Nimgun Creek, Pyramid  
Mountain, Cape Newenham, Cape Peirce, Nanavochtshak Lake, Ridge west of Sunshine Creek,  
High Lake, Heart Lake

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Cape Peirce, P. Caswell, 13 Jul 92

Huperzia selago (L.) Bernh. ex Mart. & Schrank var. densa Trevisan Fir Club Moss, Mountain  
Club Moss

(Shown in Hulten as Lycopodium selago L. subsp. appressum (Desvc.) Hult.)

Kagati Lake, Kashaik Mountain (JC)

Unmounted specimens were sent to UA Museum.

Huperzia chinensis (Christ.) Czern. Fir Club Moss, Mountain Club Moss

(Shown in Hulten as Lycopodium selago L. subsp. chinense (Christens.) Hult.)

Kagati Lake, Cape Newenham, High Lake

TNWR Mount: Kagati Lake, P. Caswell, 18 Jun 92

UA Mount: Kagati Lake, P. Caswell, 17 Jun 92 (UA listed  
subspecies.)

Lycopodium annotinum L. Stiff Club Moss, Bristly Club Moss

Kagati Lake, Kanektok River, Nimgun Lake, Cape Newenham, Cape Peirce,  
Nanavochtshak Lake, Kikertalik Lake, Banding Lake, High Lake, Heart Lake

UA Mounts of Lycopodium annotinum (subspecies not listed):

Cape Peirce, L. Schandelmeier, 28 May 70

Cape Peirce, L. Schandelmeier, 14 May 73

Kagati Lake, P. Caswell, 15 Jun 92

Lycopodium annotinum L. var. annotinum Stiff Club Moss, Bristly Club Moss

(Shown in Hulten as Lycopodium annotinum L. subsp. annotinum)

Kagati Lake, Nimgun Lake, Cape Newenham, Cape Peirce, Nanavochtshak Lake,  
Kikertalik Lake, High Lake, Heart Lake

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Cape Peirce, P. Caswell, 7 Jul 92

Lycopodium annotinum L. subsp. annotinum var. alpestre Hartm.

Stiff Club Moss, Bristly Club Moss

## Cape Newenham

TNWR Mount: Cape Newenham, P. Caswell, 15 Jun 95

Lycopodium annotinum L. var. pungens (La Pylaie) Desv. Stiff Club Moss, Bristly Club Moss  
(Shown in Hulten as Lycopodium annotinum L. subsp. pungens (La Pyl.) Hult.)

Kanektok River, Banding Lake, High Lake

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Kanektok River, P. Caswell, 20 Aug 94  
Banding Lake, W. Kirk, Sep 1988

Lycopodium clavatum L. var. monostachyon Grev. & Hook. Common Club Moss, Running Club Moss

(Shown in Hulten as Lycopodium clavatum L. subsp. monostachyon (Grev. & Hook.) Sel.)

Kagati Lake, Nanavochtshak Lake, Heart Lake

Lipkin recorded L. clavatum at Kagati Lake.

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Kagati Lake, P. Caswell, 15 Jun 92  
UA Mount: Kagati Lake, P. Caswell, 14 Jun 92  
(UA did not list variety.)

Lycopodium alpinum L. Alpine Club Moss, Ground Fir

Kagati Lake, Kanektok River (RM49), Nimgun Lake, Nimgun Creek, Pyramid Mountain, Cape Newenham, Cape Peirce, Nanavochtshak Lake, Kashaik Mountain, Kikertalik Lake, ridge west of Sunshine Creek, High Lake, Heart Lake

Recorded by Lipkin at Cape Newenham

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Kagati Lake, P. Caswell, 14 Jun 92  
UA Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92  
Cape Peirce, L. Schandelmeier, 4 Jun 70

## ISOETACEAE (Quillwort Family)

Isoetes echinospora Dur. Quillwort

(Shown in Hulten as Isoetes muricata Dur. var. Braunii (Dur.) Reed)

Nanavochtshak Lake, Togiak River, Geshiak Lake (A. Aderman & R. MacD), Togiak River

TNWR Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92  
 UA Specimen: Pond near "Big Bend" in Togiak River, P.  
 Caswell, 4 Aug 92 (det. C. Parker, UA Museum) (2 mounts)  
 HH Mount: Nanavochtskak Lake, P. Caswell, 9 Aug 92

#### EQUISETACEAE (Horsetail Family)

Equisetum variegatum Schleich. ex F. Weber & D.M. H. Mohr Variegated Horsetail, Small  
 Horsetail, Variegated Scouring Rush  
 (Shown in Hulten as Equisetum variegatum Schleich.)

Kagati Lake, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, Togiak River,  
 Banding Lake, Heart Lake

UA Mounts of Equisetum variegatum (subspecies not listed):  
 Cape Peirce, L. Schandelmeier, 5 Jun 70  
 Cape Peirce, P. Caswell, 6 Jul 92

Equisetum variegatum Schleich. ex F. Weber & D. M. H. Mohr var. variegatum Variegated  
 Horsetail, Small Horsetail, Variegated Scouring Rush  
 (Shown in Hulten as Equisetum variegatum Schleich. subsp.  
variegatum)

Kagati Lake, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, Togiak River,  
 Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 12 Aug 94  
 Cape Peirce, P. Caswell, 11 Jul 92  
 HH Mount: Cape Peirce, P. Caswell, 11 Jul 92

Equisetum variegatum Schleich. ex F. Weber & D. M. H. Mohr var. alaskanum A. A. Eat.  
 Variegated Horsetail, Variegated Scouring Rush  
 (Shown in Hulten as Equisetum variegatum Schleich. subsp.  
alaskanum (A. A.Eat.) Hult.)

Hulten indicates collection at Cape Newenham.

Note: The Heart Lake Mount (see above) has a specimen 45 cm tall, but its stem is only  
 2 mm broad. There are eight ridges. For now I am considering this a large specimen of  
 subsp. variegatum.

#### Equisetum scirpoides Michx. Dwarf Scouring Rush

Kagati Lake, Kanektok River, Arolik River (A. Archibeque & R. MacD.), Cape Newenham,  
 Cape Peirce, High Lake, Heart Lake, Milk Creek

TNWR Mount: Kanektok River, P. Caswell, 27 Jul 92  
 UA Mount: Kagati Lake, P. Caswell, 17 Jun 92

Cape Peirce - upland tundra, grassy area, L. Schandelmeier, 14 Jun 70.

Equisetum fluviatile L. amp.. Ehrh. Water Horsetail, Swamp Horsetail

Kagati Lake (BK), Kanektok River, Nimgun Creek, Cape Newenham, Cape Peirce, Nanavochtshak Lake, Togiak River, Kikertalik Lake, Igushik River, Kanakanak, High Lake, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Kagati Lake, B. Kaplin, 8 Jul 86  
 UA Mount: Cape Peirce, P. Caswell, 5 Jul 92  
 Cape Peirce, L. Schandelmeier, 2 Aug 70

Equisetum silvaticum L. Wood Horsetail, Woodland Horsetail

Kagati Lake, Kanektok River, Cape Newenham, Cape Peirce, Nanavochtshak Lake, Togiak River, Kikertalik Lake, Tuklung Lake (WK), Igushik River, Kanakanak, High Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Kagati Lake, P. Caswell, 20 Jun 92  
 Nushagak Peninsula - Tuklung Lake, H. Johnson, 1994 (3 mounts)  
 UA Mount: Cape Peirce, P. Caswell, 10 Jul 92  
 Cape Peirce, L. Schandelmeier, 9 Jun 70

Equisetum pratense L. Meadow Horsetail

Cape Newenham, Cape Peirce

TNWR Mount: Cape Newenham, P. Caswell, 15 Jun 95  
 UA Mount: Cape Peirce - grassy slope, L. Schandelmeier, 7 Jun 70  
 UA Specimen: Cape Newenham, P. Caswell, 15 Jun 95  
 HH Mount: Cape Peirce, P. Caswell, 24 Jun 95

Equisetum arvense L. Common Horsetail, Meadow Horsetail

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (LH), Geshiak Lake (A. Aderman & R. MacD.), Togiak River, Banding Lake, Kikertalik Lake (WK), Tuklung Lake (HJ), Igushik River, Kanakanak, Shannon's Pond, High Lake, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, Lisa Haggblom, 10 Jun 89  
 Cape Peirce, Lisa Haggblom, 10 Jul 89  
 Cape Peirce, P. Caswell, 4 Jul 92  
 Kikertalik Lake, W. Kirk, Sep 88 (det. A. Batten) (2 mounts)

Tuklung Lake, H. Johnson, 1994 (2 mounts)

UA Mount: Kagati Lake, P. Caswell, 14 Jun 92  
 Cape Peirce, P. Caswell, 4 Jul 92  
 Cape Peirce, L. Schandelmeier, 13 Jun 70

Equisetum arvense L form that has been called E. Calderi Boiv.

Cape Newenham, Kikertalik Lake

TNWR Mount: Cape Newenham, P. Caswell, 30 Jun 95  
 HH Mount: Kikertalik Lake - Nushagak Peninsula, P. Caswell, 19 Jul 94

OPHIOGLOSSACEAE (Adder's Tongue Family)

Botrychium lunaria (L.) Sw. Moonwort

High Lake

UA Mount: High Lake - small patch of earth on a wet boulder, P. Caswell, 4 Aug 95

Botrychium pinnatum St. John Northern Moonwort, Northern Grapefern  
 (Shown in Hulten as Botrychium boreale (E. Fries) Milde.)

Kanektok River (RD and AW)

HH Mount: Kanektok River (RM35), R. Doyle and A. Wheeler, 15 Jul 94

Botrychium lanceolatum (Gmel.) Angstr. Lance-leaved Grapefern

Kanektok River (RM 55) (JC & JP), Cape Newenham (Dr. Lipkin), Togiak Lake  
 (JC and SH), Four miles west of Cape Constantine

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Four miles west of Cape Constantine, P. Caswell and D. Albert, 29 Jul 94  
 Togiak Lake - east shore, J. Culbertson and S. Harper, 8 Jul 94

UA Mount: Four miles west of Cape Constantine, P. Caswell and D. Albert, 29 Jul 94  
 Kanektok River (RM55), J. Culbertson and J. Peirce, 21 Jun 95

HH Mount: Four miles west of Cape Constantine, P. Caswell and D. Albert, 29 Jul 94

ADIANTACEAE (Mountain Parsley Family) (Shown in Hulten as CRYPTOGRAMMACEAE)

Cryptogramma acrostichoides R. Br. Parsley Fern, Rock-brake

(Shown in Hulten as Cryptogramma crispa (L.) R. Br. var. acrostichoides (R. Br.) Clarke)

Nimgun Lake, High Lake

TNWR Mount: High Lake, P. Caswell, 4 Aug 95

Cryptogramma sitchensis (Rupr.) T. Moore Parsley Fern, Rock-brake

(Shown in Hulten as Cryptogramma crispa (L.) R. Br. var. sitchensis (Rupr.) Christens.)

Cape Newenham, Nanavochtshak Lake, Kashaik Mountain, High Lake

Recorded by Lipkin at Cape Newenham. He recorded a Kagati Lake specimen as Cryptogramma crispa approaching var. sitchensis.

TNWR Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92

UA Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92

UA Specimen: Cape Newenham, P. Caswell, 1 Jul 95

HH Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

#### THELPHYPTERIDACEAE (Marsh Fern Family)

Phegopteris connectilis (Michx.) Watt Beech Fern, Northern Beech Fern, Long Beech Fern

(Shown in Hulten as Thelypteris phegopteris (L.) Slosson.)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, Nanavochtshak Lake, Togiak River, Tuklung Lake, High Lake, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 6 Jul 92

UA Mount: Cape Peirce, P. Caswell, 6 Jul 92

Cape Peirce, M. Dick, 11 Jun 73

#### DRYOPTERIDACEAE (Shown in Hulten as ATHYRIACEAE (Lady Fern Family) and ASPIDIACEAE (Shield Fern Family))

Athyrium filix-femina (L.) Roth subsp. cyclosorum (Rupr.) Christens. Lady Fern

Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, Nanavochtshak Lake, Togiak River, Kikertalik Lake, Banding Lake, Tuklung Lake, Igushik River, Kanakanak, High Lake, Heart Lake

Hulten indicates collection at Cape Newenham.

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, P. Caswell, 18 Jul 92  
 Heart Lake, P. Caswell, 6 Aug 94  
 High Lake, P. Caswell, 27 Jul 95  
 UA Mount: Igushik River, P. Caswell, 26 Jul 94

Cystopteris fragilis (L.) Bernh. Fragile Fern

(Shown in Hulten as Cystopteris fragilis (L.) Bernh. subsp. fragilis and Cystopteris fragilis (L.) Bernh. subsp. Dickieana (Sim) Hyl.)

Kagati Lake, Kanektok River (RD & AW), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, Kashaik Mountain, Togiak River, Banding Lake, High Lake, Heart Lake

Hulten indicates collection near Chagvan Bay.

TNWR Mount: Togiak River, P. Caswell, 9 Aug 92  
 UA Mount: Kagati Lake, P. Caswell, 29 Jun 92  
 Togiak River, P. Caswell, 5 Aug 92  
 Cape Peirce, P. Caswell, 6 Jul 92  
 Cape Peirce, M. Dick, 7 Jun 73

Examination of spores from unmounted specimens at the Hoysradt Herbarium enabled determination of some specimens to subspecies as shown in Hulten. Kartesz does not recognize these subspecies.

Cystopteris fragilis (L.) Bernh. subsp. fragilis

Heart Lake

Cystopteris fragilis (L.) Bernh. subsp. Dickieana (Sim) Hyl.

Kanektok River, Nimgun Creek, Heart Lake

Woodsia ilvensis (L.) R. Br. Rusty Woodsia

Kagati Lake, Kanektok River (RD & AW), Nimgun Creek, Cape Newenham, Slug Mountain, Killian Ridge, High Lake, Heart Lake, Milk Creek

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Kanektok River, R. Doyle and A. Wheeler, 29 Jun 94  
 UA Mount: Kanektok River, P. Caswell, 19 Aug 94

Woodsia alpina (Bolton) S. F. Gray Northern Woodsia, Alpine Woodsia

Nimgun Lake

TNWR Mount: Nimgun Lake, P. Caswell, 17 Jun 94

Woodsia glabella R. Br. Smooth Woodsia

Kagati Lake (Dr. Lipkin), Kanektok River (RM 46), Nimgun Lake, High Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Nimgun Lake, P. Caswell, 15 Jun 94

UA Mount: Kanektok River (RM46), P. Caswell, 26 Aug 95

Matteuccia struthiopteris (L.) Todaro Ostrich Fern

Sunshine Creek

TNWR Mount: Sunshine Creek, P. Caswell, 6 Jun 94

Polystichum lonchitis (L.) Roth Holly Fern

High Lake

TNWR Mount: High Lake, P. Caswell, 19 Jul 95

UA Mount: High Lake, P. Caswell, 19 Jul 95

Dryopteris campyloptera Clarkson Spinulose Wood Fern

(Shown in Hulten as Dryopteris dilatata (Hoffm.) Gray subsp. americana (Fisch.) Hult.)

Kagati Lake, Kanektok River (RM49), Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (LH), Nanavochtshak Lake, Togiak Lake, Geshiak Lake (A. Aderman & R. MacD.), Togiak River, Banding Lake, Kikertalik Lake (WK), Tuklung Lake, Igushik River, Kanakanak, Shannon's Pond, Sunshine Creek, High Lake, Heart Lake

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, Lisa Haggblom, 26 Jul 89

Nushagak Peninsula - Lake Kikertalik, W. Kirk, Sep 88 (Det. A. Batten 93) (3 mounts)

Gymnocarpium dryopteris (L.) Newm. Oak Fern

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, Nanavochtshak Lake, Togiak River, Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak, Shannon's Pond, High Lake, Heart Lake

Recorded by Lipkin at Cape Newenham.

Hulten indicates collection at Cape Newenham.

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Kanektok River, P. Caswell, 27 Jul 92

UA Mount: Cape Peirce, P. Caswell, 6 Jul 92

## PINACEAE (Pine Family)

Picea glauca (Moench) Voss White Spruce

Eastward from a small stand on the upper portion of the Togiak River. A tiny spruce grows near the alder thicket about a quarter mile southwest of Nimgun Lake.

## SPARGANIACEAE (Bur Reed Family)

Sparganium angustifolium Michx. Narrow-leaved Burreed  
(Kartesz includes Sparganium multipedunculatum (Morong) Rydb. in this taxon.)

Kanektok River, Nanavochtshak Lake, Togiak Lake, Togiak River, Heart Lake

TNWR Mount: Ponds near "Big Bend" in Togiak River, P. Caswell, 12 Aug 92

UA Mount: Togiak River, P. Caswell, 4 Aug 92

Sparganium nutans L. Small Burreed  
(Shown in Hulten as Sparganium minimum (Hartm.) E. Fries)

Kanektok River, Nimgun Creek, Cape Peirce, Togiak River, Four miles west of Cape Constantine, Banding Lake, Tuklung Lake, High Lake, Heart Lake

TNWR Mount: Ponds near "Big Bend" in Togiak River, P. Caswell, 13 Aug 92

UA Mount: Ponds near "Big Bend" in Togiak River, P. Caswell, 13 Aug 92  
Cape Peirce, L. Schandelmeier, 19 Aug 73

Sparganium hyperboreum Laestad. ex Beurling Northern Burreed

Reported by Dick (Schandelmeier) at Cape Peirce. However, as she did not mention Sparganium minimum, she may have changed her determination to Sparganium minimum subsequent to her report.

ZOSTERACEAE (Eelgrass Family) (Hulten includes Zostera in the  
POTOMOGETONACEAE)

Zostera marina L. Eelgrass

Security Cove (washed up on beach), Cape Peirce (washed up on beach), Togiak (washed up on beach)

Hulten indicates collection at Cape Newenham.

Collected by Dick (Schandelmeier) in Nanvak and Chagvan Bays.

TNWR Mount: Cape Peirce (Nanvak Bay), P. Caswell, 12 Jul 92

UA Mount: Cape Peirce (Nanvak Bay), P. Caswell, 12 Jul 92

HH Mount: Cape Peirce (Nanvak Bay), P. Caswell, 12 Jul 92

POTAMOGETONACEAE (Pondweed Family)

Potamogeton alpinus Balbis Alpine Pondweed, Reddish Pondweed, Northern Pondweed  
(Shown in Hulten as Potamogeton alpinus Balb. subsp. tenuifolius (Raf.) Hult.)

Togiak River, Nanavochtshak Lake, Four miles west of Cape Constantine, Tuklung Lake,  
Heart Lake

TNWR Mount: Nanavochtshak Lake, P. Caswell, 10 Aug 92

UA Mount: Nanavochtshak Lake, P. Caswell, 10 Aug 92 (UA listed subspecies.)

Potamogeton praelongus Wulf. White-stemmed Pondweed

Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 6 Aug 94

Potamogeton richardsonii (Benn.) Rydb. Claspingleaf Pondweed  
(Shown in Hulten as Potamogeton perfoliatus L. subsp. Richardsonii (Bennett) Hult.)

Togiak River, Pond between Ongivinuck River and Pungokepuk Lake, Kikertalik Lake,  
Heart Lake

TNWR Mount: Pond near "Big Bend" in Togiak River, P. Caswell, 12 Aug 92

UA Mount: Togiak River, P. Caswell, 12 Aug 92

Potamogeton pusillus L. var. tenuissimus Mert. & Koch Berchtold's Pondweed  
(Shown in Hulten as Potamogeton Berchtoldi Fieb.)

Nanavochtshak Lake, Four miles west of Cape Constantine

TNWR Mount: Nanavochtshak Lake, P. Caswell, 10 Aug 92

UA Mount: Nanavochtshak Lake, P. Caswell, 10 Aug 92  
(UA listed subspecies.)

HH Mount: Nanavochtshak Lake, P. Caswell, 10 Aug 92

Potamogeton filiformis Pers. Filiform Pondweed

Pond at Quinhagak beach, Togiak River, Four miles west of Cape Constantine, Heart  
Lake

TNWR Mount: Pond near "Big Bend" in Togiak River, P. Caswell, 12 Aug 92

UA Mount: Pond at Quinhagak sea shore, P. Caswell, 28 Jul 92  
Togiak River, P. Caswell, 12 Aug 92

Potamogeton vaginatus Turcz. Sheathed Pondweed

Kanektok River, Cape Peirce, Togiak River, Heart Lake

TNWR Mount: Cape Peirce, P. Caswell, 17 Jul 92

UA Mount: Cape Peirce - pond at TNWR cabin, P. Caswell, 17 Jul 92

ZANNICHELLIACEAE (Hulten includes Zannichellia in the POTAMOGETONACEAE)

Zannichellia palustris L. Horned Pondweed

Pond at Quinhagak beach

TNWR Mount: Pond at Quinhagak beach, P. Caswell, 28 Jul 92

JUNCAGINACEAE (Arrow Grass Family)

Triglochin palustre L. Marsh Arrow Grass

(Shown in Hulten as Triglochin palustris L.)

Quinhagak beach, Cape Peirce

TNWR Mount: Cape Peirce, P. Caswell, 10 Jul 92

UA Mount: Cape Peirce, P. Caswell, 11 Jul 92

POACEAE (Grass Family) (Shown in Hulten as GRAMINEAE)

Hierochloa alpina (Sw.) Roem. & Schult. Alpine Holy Grass

Kagati Lake, Kanektok River (RM49), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce (LH), Nanavochtshak Lake, Togiak River, Kashaik Mountain, Banding Lake (WK), Ridge west of Sunshine Creek, High Lake, Heart Lake (Viviparous forms are found at Cape Newenham and Cape Peirce.)

Recorded by Lipkin at Cape Newenham.

Hulten indicates collections near Goodnews and Cape Peirce.

TNWR Mount: Cape Peirce, Lisa Haggblom, 17 Jun 89

Cape Peirce, P. Caswell, 3 Jul 92

(Viviparous form) Cape Peirce, P. Caswell, 16 Jul 92

Nushagak Peninsula - Banding Lake, W. Kirk, Sep 88 (det. A. Batten 93)

UA Mount: (Viviparous form) Cape Peirce, P. Caswell, 17 Jul 92

Cape Peirce, L. Schandelmeier, 8 Jun 73

HH Mount: (Viviparous form) Cape Peirce, P. Caswell, 16 Jul 92

Hierochloa odorata (L.) Wahlenb. Vanilla Grass

Kagati Lake, Cape Newenham, Cape Peirce, High Lake, Togiak River

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Kagati Lake, P. Caswell, 29 Jun 92

UA Mount: Kagati Lake, P. Caswell, 29 Jun 92

Hierochloa pauciflora R. Br. Arctic Holy Grass

Cape Newenham, Cape Peirce, High Lake, Heart Lake (but panicle scabrous)

Recorded by Lipkin at Cape Newenham.

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, P. Caswell, 7 Jul 92

UA Mount: Cape Newenham, P. Caswell, 27 Jun 95

Phleum alpinum L. Mountain Timothy

(Shown in Hulten as Phleum commutatum Gandoger var. americana (Fourn.) Hult.)

High Lake, Kashaik Mountain, Tuklung Lake, Kikertalik Lake, Heart Lake

TNWR Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

Phleum pratense L. Timothy

Kanakanak

TNWR Mount: Kanakanak, P. Caswell, 19 Aug 95

Alopecurus borealis Trin. Gray Foxtail, Alpine Foxtail, Mountain Foxtail

(Shown in Hulten as Alopecurus alpinus Sm. subsp. alpinus, Alopecurus alpinus Sm. subsp. glaucus (Less.) Hult. and Alopecurus alpinus Sm. subsp. Stejnegeri (Vasey) Hult.)

Recorded by Lipkin at Cape Newenham.

UA Mounts: Cape Peirce, L. Schandelmeier, 13 Jun 70

Cape Peirce, P. Caswell, 12 Jul 92

Quinhagak, several miles up Kanektok Rive, P. Caswell, 26 Jul 92

Quinhagak, Airport Road, P. Caswell 28 Jul 92

Specimens fitting Hulten's description of Alopecurus alpinus Sm. subsp. alpinus were found at Nimgun Creek, Cape Peirce and High Lake.

TNWR Mount: Cape Peirce, P. Caswell, 18 Jul 92

HH Mount: Cape Peirce, P. Caswell, 4 Jul 92

Specimens fitting Hulten's description Alopecurus alpinus Sm. subsp. glaucus (Less.)

Hult. were found at Kanektok River, Quinhagak beach, Goodnews River, Cape Newenham (LH & LJ) and Togiak River.

TNWR Mount: Goodnews River, River Ranger Camp, P. Caswell, 12 Jul 94  
 HH Mount: Kanektok River, P. Caswell, 28 Jul 92

Specimens fitting Hulten's description of Alopecurus alpinus Sm. subsp. Stegnegeri (Vasey) Hult. were found at Quinhagak Airport and Cape Newenham.

TNWR Mount: Cape Newenham, P. Caswell, 2 Jun 95  
 HH Mount: Quinhagak Airport, P. Caswell, 28 Jul 92

Alopecurus aequalis Sobol. Fox Tail, Short-awn Fox Tail

Kanektok River, Goodnews River (ET), High Lake, Togiak Lake, Togiak River, Milk Creek

TNWR Mount: Kanektok River - lower part, P. Caswell, 26 Jul 92  
 UA Mount: Kanektok River, P. Caswell, 26 Jul 92

Phippsia algida (Phipps) R. Br. Snow Grass  
 (Shown in Hulten as Phippsia algida (Soland.) R. Br.)

Cape Peirce

TNWR Mount: Cape Peirce, P. Caswell, 12 Aug 95  
 UA Mount: Cape Peirce, P. Caswell, 12 Aug 95  
 HH Mount: Cape Peirce, P. Caswell, 12 Aug 95

Arctagrostis latifolia (R. Br.) Griseb. Polar Grass

Kanektok River, Quinhagak beach, Cape Newenham, Cape Peirce, Slug Mountain, Nanavochtshak Lake, Togiak Lake, Togiak River, Banding Lake, Kikertalik Lake, Igushik River, Kanakanak, Heart Lake

UA Mount: Cape Peirce, L. Schandelmeier, 9 Aug 70  
 Gechiak - vicinity, M. Dick, 7 Aug 73  
 Togiak Lake, SE shore, M. Dick, 3 Aug 73

Arctagrostis latifolia (R. Br.) Griseb. subsp. latifolia Polar Grass  
 (Shown in Hulten as Arctagrostis latifolia (R. Br.) Griseb. var. latifolia)

Cape Peirce, Slug Mountain, Nanavochtshak Lake, Banding Lake, Kikertalik Lake (HJ), Igushik River, Kanakanak, Heart Lake

Hulten indicates collections near Cape Newenham and Kagati Lake.

TNWR Mount: Cape Peirce, P. Caswell, 19 Jul 92  
 Nushagak Peninsula, H. Johnson, Aug 93  
 Nushagak Peninsula - Lake Kikertalik, H. Johnson, Aug 93  
 UA Mount: Kanektok River, P. Caswell, 31 Aug 95

Arctagrostis latifolia (R. Br.) Griseb. subsp. arundinacea (Trin.) Tzvelev Polar Grass  
 (Shown in Hulten as Arctagrostis latifolia (R. Br.) Griseb. var. arundinacea (Trin.) Griseb.,  
Arctagrostis latifolia (R. Br.) Griseb. var. angustifolia (Nash) Hult. and Arctagrostis  
poaeoides Nash)

Kanektok River, Quinhagak beach, Cape Newenham, Cape Peirce, Togiak River (near  
 River Ranger Camp), Kikertalik Lake, Banding Lake, Igushik River, Kanakanak, Heart  
 Lake.

Lipkin records Arctagrostis latifolia var. angustifolia at Cape Newenham.

TNWR Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92  
 Nushagak Peninsula, H. Johnson, Aug 93 (Det. E. Maricheva)  
 Nushagak Peninsula - Kikertalik Lake, H. Johnson, Aug 93 (Det. E.  
 Maricheva)

UA Mount: Quinhagak - several miles up the Kanektok River, P. Caswell, 26 Jul 92  
 (UA listed subspecies.)

Agrostis mertensii Trin. Red Bent Grass, Northern Bent Grass  
 (Shown in Hulten as Agrostis borealis Hartm.)

Nimgun Creek, High Lake

TNWR Mount: High Lake, P. Caswell, 2 Aug 95  
 Nimgun Creek, P. Caswell, 8 Jul 94

UA Mount: High Lake, P. Caswell, 2 Aug 95

Agrostis vinealis Schreb. subsp. trinii (Turcz.) Tzvelev  
 (Shown in Hulten as Agrostis Trinii Turcz.)

Kanektok River, Quinhagak beach, Cape Peirce

TNWR Mount: Cape Peirce, P. Caswell, 12 Jul 92

UA Mount: Cape Peirce, P. Caswell, 13 Jul 92

Agrostis alascana Hulten Alaska Bentgrass  
 (Shown in Hulten as Agrostis alaskana Hult.)

Cape Peirce, Lake Kikertalik (WK)

Hulten indicates collection at Cape Newenham.

TNWR Mount: Lake Kikertalik, W. Kirk, Aug 90 (det. A. Batten 1993)

UA Mount: Cape Peirce, P. Caswell, 10 Aug 95

Agrostis gigantea Roth

Cape Newenham (Dr. Lipkin)

Recorded by Lipkin at Cape Newenham.

Agrostis scabra Willd. Ticklegrass

Kagati Lake (Dr. Lipkin), Kanektok River, Nimgun Creek, Cape Newenham (Dr. Lipkin), Togiak River, Four miles west of Cape Constantine, Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak, Heart Lake, Milk Creek

Recorded by Lipkin at Kagati Lake and Cape Newenham.

Specimens collected at Togiak River appear atypical. Carolyn Parker, UA Museum, examined several and considered them to be Agrostis scabra.

TNWR Mount: Kanektok River, P. Caswell, 27 Jul 92  
Nushagak Peninsula, H. Johnson, Aug 93 (Det. E. Maricheva 95) (2 Mounts)  
UA Mount: Kanektok River - several miles upstream from Quinhagak, P. Caswell, 26 Jul 92  
Togiak River, P. Caswell, 4 Aug 92  
Togiak River, P. Caswell, 5 Aug 92

Calamagrostis canadensis (Michx.) Beauv. Blue-joint

Kanektok River, Arolik River (A. Archibeque & R. MacD.) Goodnews River, Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake (WK), Tuklung Lake (HJ), Igushik River, Kanakanak, Shannon's Pond, Heart Lake

Schandelmeier collected Calamagrostis canadensis at Cape Peirce.

Calamagrostis canadensis (Michx.) Beauv. var. canadensis Blue-joint  
(Shown in Hulten as subsp. canadensis)

Kanektok River, Arolik River (A. Archibeque & R. MacD.), Goodnews River, Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake (WK), Tuklung Lake (HJ), Kanakanak, Shannon's Pond, Heart Lake

TNWR Mount: Togiak River, P. Caswell, 7 Aug 92  
Nushagak Peninsula, H. Johnson, Aug 93  
UA Mount: Quinhagak - several miles up the Kanektok River, P. Caswell, 26 Jul 92  
(UA listed subspecies.)

Calamagrostis canadensis (Michx.) Beauv. var. langsdoeffii (Link) Inman Bluejoint  
(Shown in Hulten as Calamagrostis canadensis (Michx.) Beauv. subsp. Langsdorffii (Link) Hult.)

Kikertalik Lake, Four miles west of Cape Constantine, Banding Lake, Tuklung Lake, Igushik River, Kanakanak

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Kikertalik Lake, P. Caswell, 20 Aug 92  
 Nushagak Peninsula - Tuklung Lake, H. Johnson, Aug 93  
 Nushagak Peninsula, H. Johnson, Aug 93 (2 mounts)  
 UA Mount: Kikertalik Lake, P. Caswell, 20 Aug 92 (UA listed subspecies.)

Calamagrostis inexpansa Gray Northern Reedgrass

Tuklung Lake

TNWR Mount: Tuklung Lake, H. Johnson, 1993 (spike and a few inches of culm only)

Calamagrostis lapponica (Wahlenb.) Hartm. Lapland Reedgrass

Cape Peirce, Banding Lake, Kikertalik Lake, Tuklung Lake

TNWR Mount: Nushagak Peninsula, H. Johnson, Aug 93 (2 mounts)  
 TNWR Spec: Cape Peirce, P. Caswell, 8 Aug 95  
 UA Mount: Tuklung Lake, P. Caswell, 22 Jul 94  
 UA Specimen: Cape Peirce, P. Caswell, 9 Aug 95  
 HH Mount: Banding Lake, P. Caswell, 18 Jul 94  
 Kikertalik Lake, P. Caswell, 19 Jul 94

Calamagrostis deschampsoides Trin. Reed Bent-grass

Cape Peirce

UA Mount: Cape Peirce, L. S. Dick, 18 Jul 70

Deschampsia caespitosa (L.) Beauv. Tufted Hairgrass

Kanektok River, Quinhagak Airport, Quinhagak beach, Nimgun Creek, Goodnews River,  
 Cape Newenham, Cape Peirce, Togiak River, Four miles west of Cape Constantine

UA Mount: Cape Peirce, L. Schandelmeier, 1 Aug 70  
 Togiak Lake, SE shore, M. Dick, 3 Aug 73

Deschampsia caespitosa (L.) Beauv. subsp. caespitosa Tufted Hairgrass  
 (Shown in Hulten as Deschampsia caespitosa (L.) Beauv. subsp. caespitosa var.  
caespitosa)

Kanektok River, Quinhagak Airport, Quinhagak beach, Nimgun Creek, Goodnews River,  
 Cape Newenham, Cape Peirce, Togiak River

Hulten indicates collection near Goodnews.

TNWR Mount: Togiak River, P. Caswell, 7 Aug 92  
 UA Mount: Kanektok River - lower part of river, P. Caswell, 29 Jul 92  
 Togiak River, P. Caswell, 7 Aug 92

Cape Newenham, P. Caswell, 8 Jul 92

Note: There is a possibility that UA Museum listed specimens using Hulten's nomenclature. This means subsp. glauca could be included in the mounts immediately above. I believe both the Kanektok River and Cape Newenham specimens are subsp. glauca.

Deschampsia caespitosa (L.) Beauv. subsp. glauca (Hartman) Hartman Tufted Hairgrass  
(Shown in Hulten as Deschampsia caespitosa (L.) Beauv. subsp. caespitosa var. glauca (Hartm.) Sam.)

Kanektok River, Cape Newenham, Cape Peirce, Togiak River, Four miles west of Cape Constantine

TNWR Mount: Kanektok River, P. Caswell, 29 Jul 92

Deschampsia caespitosa (L.) Beauv. subsp. orientalis Hult. Tufted Hairgrass

Cape Peirce, Four miles west of Cape Constantine

Hulten indicates collection from Cape Newenham

TNWR Mount: Cape Peirce, P. Caswell, 12 Jul 92

UA Specimen: PPC-92-374 Cape Peirce, P. Caswell, 4 Jul 92

Deschampsia caespitosa (L.) Beauv. subsp. beringensis (Hulten) W.E. Lawrence Bering Hairgrass

(Shown in Hulten as Deschampsia beringensis Hult.)

Kanektok River, Quinhagak beach, Cape Newenham (LH & LJ), Cape Peirce, Igushik River, Kanakanak

Lipkin records Deschampsia beringensis (toward D. caespitosa caespitosa - introgression??) At Cape Newenham.

Hulten indicates collection at Cape Newenham.

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92

UA Mount: Quinhagak - several miles up the Kanektok River, P. Caswell, 26 Jul 92

HH Mount: Kanektok River, P. Caswell, 26 Jul 92

Vahlodea atropurpurea (Wahlenb.) Fries ex Hartman Mountain Hairgrass  
(Shown in Hulten as Vahlodea atropurpurea (Wahlenb.) E. Fries subsp. paramushirensis (Kudo) Hult., and Vahlodea atropurpurea (Wahlenb.) E. Fries subsp. latifolia (Hook.) Pors.)

Kanektok River(Rm57), High Lake, Nanavochtshak Lake

UA Mount: Togiak Lake (Nanavochtshak Lake), P. Caswell, 9 Aug 92

Specimens fitting Hulten's description of subsp. paramushirensis were found at Kanektok River (RM57) and Nanavochtshak Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92  
 UA Mount: Kanektok River (RM57), P. Caswell, 27 Aug 95 (UA Museum listed subspecies.)

Specimens fitting Hulten's description of subsp. latifolia (Hook.) Pors. were found at High Lake.

TNWR Mount: High Lake, P. Caswell, 27 Jul 95  
 UA Specimen: High Lake, P. Caswell, 25 Jul 95  
 HH Mount: High Lake, P. Caswell, 27 Jul 95

Trisetum spicatum (L.) Richter Downy Oatgrass

(Hulten shows three subspecies, spicatum, alaskanum and molle, which are no longer recognized.)

Kanektok River (RD & AW), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Pond between Ongivinuck River and Pungokepek Lake, Kashaik Mountain, Togiak River, Heart Lake

UA Mount: Cape Peirce, L. S. Dick, 16 Jul 70  
 Cape Peirce, P. Caswell, 16 Jul 92  
 Pond between Ongivinuck River and Pungokepek Lake, P. Caswell, 6 Aug 92

Specimens fitting Hulten's description of Trisetum spicatum (L.) Richter subsp. spicatum were found at Kanektok River (RD & AW), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Kashaik Mountain and Heart Lake.

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Nimgun Creek, P. Caswell, 7 Jul 94

Specimens fitting Hulten's description of Trisetum spicatum (L.) Richter subsp. alaskanum (Nash) Hult. were found at Kanektok River, Cape Newenham, Cape Peirce, Togiak River and Heart Lake.

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92  
 UA Mount: Kanektok River, P. Caswell, 26 Jul 92 (UA listed subspecies.)

Specimens fitting Hulten's description of Trisetum spicatum (L.) Richter subsp. molle (Michx.) Hult. were found at a pond between Ongivinuck River and Pungokepek Lake.

HH Mount: Pond between Ongivinuck River and Pungokepek Lake, P. Caswell, 6 Aug 92

Beckmannia syzigachne (Steud.) Fern. Slough Grass

(Shown in Hulten as Beckmannia erucaeformis (L.) Host subsp. baicalensis (Kuzn.) Hult.)

Kanektok River, Quinhagak beach, Togiak River, Rainbow Creek (JC & PC),  
Kanakanak

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92

UA Mount: Kanektok River, P. Caswell, 26 Jul 92

HH Mount: Kanektok River, P. Caswell, 26 Jul 92

Poa arctica R. Br. Arctic Meadow Grass, Arctic Bluegrass

(Includes Poa lanata. UA Museum considers Poa lanata and Poa arctica to be a continuum, but still recognizes Poa lanata.)

Cape Newenham, Cape Peirce, High Lake, Kashaik Mountain, Banding Lake

UA Mounts of Poa arctica (subspecies not listed):

Cape Peirce, P. Caswell, 7 Jul 92 (2 mounts)

Cape Peirce, P. Caswell, 4 Jul 92

Cape Newenham, P. Caswell, 5 Jul 95

Poa arctica R. Br. subsp. arctica Arctic Meadow Grass, Arctic Bluegrass

Cape Newenham, Cape Peirce

TNWR Mount: Cape Peirce, P. Caswell, 9 Jul 92

Poa arctica R. Br. subsp. longiculmis Hult. Arctic Meadow Grass, Arctic Bluegrass

Cape Newenham, Cape Peirce, Nushagak Peninsula, Banding Lake

TNWR Mount: Nushagak Peninsula, H. Johnson, Aug 93 (Det. E. Maricheva 95)

Poa arctica R. Br. subsp. longiculmis Hult. (Viviparous form) Arctic Meadow Grass, Arctic Bluegrass

Kashaik Mountain

Carolyn Parker, UA Museum, examined a specimen (Kashaik Mountain, P. Caswell, 2 Aug 92) and called it Poa vivipara, arctica type.

Poa arctica R. Br. subsp. williamsii (Nash) Hult. Arctic Meadow Grass, Arctic Bluegrass

Cape Peirce

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 20 Jul 92

Cape Peirce, L. Haggblom, 26 Jul 89

Poa arctica R. Br. subsp. lanata (Scribn. & Merr.) Soreng Woolly Bluegrass

(Shown in Hulten as Poa lanata Scribn. & Merr.)

Kanektok River, Nimgun Lake, Nimgun Creek, Goodnews River, Cape Newenham (LH & LJ), Cape Peirce, High Lake, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Heart Lake, Milk Creek  
 Viviparous plants were found at Cape Newenham, High Lake and Heart Lake.

TNWR Mount: Cape Peirce, P. Caswell, 12 Jul 92  
 Heart Lake, P. Caswell, 3 Aug 94 (2 mounts)

UA Mount: Cape Peirce, P. Caswell, 18 Jul 92

Poa eminens Presl Large-flower Speargrass

Quinhagak Airport, Quinhagak beach, Cape Peirce beach, Four miles west of Cape Constantine, Banding Lake, Igushik River

Hulten indicates collection at Cape Newenham.  
 Collected by Dick at Cape Peirce.

TNWR Mount: Quinhagak beach, P. Caswell, 28 Jul 92  
 Banding Lake, W. Kirk, Oct 90 (Det. by E.

Maricheva as: Arctopoa eminens (C. Presl) Probat: (Poa eminensis C. Presl)

UA Mount: Quinhagak Airport, P. Caswell, 28 Jul 92  
 Cape Peirce, P. Caswell, 18 Jul 92

HH Mount: Quinhagak beach, P. Caswell, 28 Jul 92

Poa macrocalyx Trautv. & Mey. Hispid Bluegrass, Rough Bluegrass  
 (Includes Poa hispidula Vasey. UA Museum is still listing the taxa separately.)

Cape Newenham (P. macrocalyx), Cape Peirce (P. hispidula)

TNWR Mount: Cape Peirce, P. Caswell, 8 Jul 92

UA Mount: Cape Peirce, P. Caswell, 8 Jul 92 (Listed as P. hispidula)  
 Cape Peirce, P. Caswell, 13 Jul 92 (Listed as P. hispidula)

UA Spec: Cape Newenham, P. Caswell, 29 Jun 95 (Submitted as P. macrocalyx)

HH Mount: Cape Peirce, P. Caswell, 8 Jul 92

Poa pratensis L. Bluegrass, Kentucky Bluegrass

(Kartesz includes Poa alpigena (E. Gries) Lindm. in this taxon. For the moment I am listing them separately.)

Kanektok River, Cape Peirce, Togiak River

TNWR Mount: Togiak River - gravel bar at lower part of "Big Bend" on river, just upstream from Pungokepek Creek, P. Caswell, 7 Aug 92  
 Kanektok River - lower part, P. Caswell, 26 Jul 92 (2 mounts)

UA Mount: Togiak River, P. Caswell, 7 Aug 92  
 Kanektok River - lower part, P. Caswell, 29 Jul 92

Specimens fitting Hulten=s description of Poa alpigena (E. Fries) Lindm. Bluegrass

Kanektok River, Togiak River

Hulten indicates collection near Kagati Lake.

UA Mount: Togiak River, P. Caswell, 7 Aug 92 (UA listed Poa alpigena)

Poa glauca M. Vahl Glaucous Bluegrass, Spear Grass, Glaucous Speargrass

Kagati Lake (Dr. Lipkin), Cape Newenham, Heart Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Heart Lake, P. Caswell, 3 Aug 94

UA Mount: Heart Lake, P. Caswell, 3 Aug 94

Poa malacantha Kom. Tufted Woolly Bluegrass

Kagati Lake (Dr. Lipkin), Kanektok River (RM57), Nimgun Creek

Recorded by Lipkin at Kagati Lake

TNWR Mount: Kanektok River (RM57), P. Caswell, 27 Aug 95

UA Mount: Nimgun Creek, P. Caswell, 5 Jul 94

Poa leptocoma Trin. subsp. paucispicula (Scribn. & Merr.) Tzvelev Bog Bluegrass  
(Shown in Hulten as Poa paucispicula Scribn. & Merr.)

Cape Newenham (Dr. Lipkin), High Lake, Kashaik Mountain, Heart Lake

Recorded by Lipkin at Cape Newenham.

Specimens are taller than Hulten's description, but Carolyn Parker examined a specimen and confirmed that it was Poa paucispicula. Similar specimens have been collected in Wood Tikchik State Park.

TNWR Mount: Heart Lake, P. Caswell, 5 Aug 94

UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

HH Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

Poa pseudoabbreviata Roshev. Ridgetop Bluegrass  
(Kartesz includes Poa brachyanthera Hult. in this taxon.)

Nimgun Creek, Cape Newenham, Heart Lake

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Nimgun Lake, P. Caswell, 15 Jun 94

UA Mount: Nimgun Creek, P. Caswell, 7 Jul 94

Heart Lake, P. Caswell, 5 Aug 94

HH Mount: Nimgun Lake, mountain summit north of lake, P. Caswell, 17 Jun

Arctophila fulva (Trin.) Anderss. Pendant Grass

Kanektok River, Quinhagak beach, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak Lake, Togiak River, Tuklung Lake, Igushik River, Kanakanak, Heart Lake, Milk Creek

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92

UA Mount: Cape Peirce, P. Caswell, 14 Jul 92

Dupontia fisheri R. Br. Tundra Grass, Dupontia

(Shown in Hulten as Dupontia Fischeri R. Br. subsp. psilosantha (Rupr.) Hult.)

Cape Newenham (Dr. Lipkin), Cape Peirce, Banding Lake

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Banding Lake, P. Caswell, 18 Jul 94 (2 mounts)

UA Mount: Cape Peirce, P. Caswell, 8 Jul 92 (Determined by C. Parker) C. Parker described the specimen as "an unusual single flowered form." (UA listed subspecies.)

Cape Peirce, L. Schandelmeier, 10 Jul 70

HH Mount: Cape Peirce, P. Caswell, 8 Jul 92

Puccinellia phryganodes (Trin.) Scribn. & Merr. Creeping Alkaligrass, Creeping Salt-grass

Beach on Bering Sea at Quinhagak. Cape Peirce

TNWR Mount: Quinhagak beach, P. Caswell, 28 Jul 92

UA Mount: Quinhagak beach, P. Caswell, 28 Jul 92

Cape Peirce, P. Caswell, 8 Aug 95

HH Mount: Quinhagak beach, P. Caswell, 28 Jul 92

Puccinellia nutkaensis (Presl) Fern. & Weath.

Cape Newenham (Dr. Lipkin), Cape Peirce

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 10 Aug 95

UA Specimen: Cape Peirce, P. Caswell, 12 Aug 95

HH Mount: Cape Peirce, P. Caswell, 10 Aug 95

Puccinellia arctica (Hook.) Fern. & Weatherby TENTATIVE

(Shown in Hulten as Puccinellia borealis Swallen)

Cape Peirce

TNWR Mount: Cape Peirce, P. Caswell, 13 Aug 95  
 UA Specimen: Cape Peirce, P. Caswell, 13 Aug 95  
 HH Mount: Cape Peirce, P. Caswell, 13 Aug 95

Festuca altaica Trin. Rough Fescue

Kagati Lake, Kanektok River (RM49), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak River, Kikertalik Lake, Tuklung Lake, Igushik River, Heart Lake

Hulten indicates collections at Cape Newenham, Kagati Lake and Togiak village.

TNWR Mount: Cape Peirce, P. Caswell, 4 Jul 92  
 Nushagak Peninsula, H. Johnson, 1994  
 UA Mount: Cape Peirce, P. Caswell, 4 Jul 92  
 Cape Peirce, L. Schandelmeier, 11 Jul 70

Festuca brachyphylla Schult. Sheep Fescue, Alpine Fescue

Kagati Lake (Dr. Lipkin), Kanektok River, Cape Newenham, Cape Peirce, High Lake

Recorded by Lipkin at Kagati Lake.

Hulten indicates collection near Kagati Lake.

Reported by Dick (Schandelmeier) at Cape Peirce.

UA Mount: Kanektok River (RM50), R. Doyle and A. Wheeler, 29 Jun 94  
 UA Specimen: Kanektok River - several miles upstream from Quinhagak, P. Caswell, 26 Jul 92

Festuca brevissima Jurtsev

Use AFescue Grasses of Canada@ for identification.

Kagati Lake (Dr. Lipkin), Nimgun Lake, Nimgun Creek, Cape Newenham (Dr. Lipkin), Cape Peirce, Slug Mountain, High Lake

Recorded by Lipkin at Kagati Lake and Cape Newenham.

TNWR Mount: Slug Mountain, P. Caswell, 15 Jul 92  
 UA Specimens: Nimgun Creek, P. Caswell, 7 Jul 94  
 Nimgun Lake, P. Caswell, 15 Jun 94

Festuca saximontana Rydberg VERY TENTATIVE

Cape Peirce

TNWR Mount: Cape Peirce, P. Caswell, 9 Aug 95

Note: A specimen has been sent to Dr. Lipkin for verification. The plant is only slightly over 12 cm tall, but has anthers up to 2 mm in length.

Festuca vivipara (L.) Sm.(Shown in Hulten as "Festuca vivipara")

Kanektok River, High Lake

TNWR Mount: High Lake, P. Caswell, 4 Aug 95

Festuca rubra L. coll. Red Fescue

Kanektok River, Quinhagak beach, Arolik River (A. Archibeque &amp; R. MacD.), Nimgun Creek, Goodnews River, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak River, Four miles west of Cape Constantine, Igushik River, Kanakanak

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, P. Caswell, 9 Aug 95

UA Mount: Togiak River, P. Caswell, 5 Aug 92

Four miles west of Cape Constantine, P. Caswell, 28 Jul 94

Cape Peirce, P. Caswell, 18 Jul 92

Festuca rubra L. subsp. arctica (Hack.) Govor.(Shown as Fescue richardsonii Hooker in AFescue Grasses of Canada.)

Cape Newenham, Cape Peirce

TNWR Mount: Cape Peirce, P. Caswell, 13 Jul 92

Cape Newenham, P. Caswell, 5 Jul 95

Bromus inermis Leyss. var. pumpellianus (Scribn.) C.L. Hitchc. Arctic Brome, Villous Arctic Brome  
(Shown in Hulten as Bromus Pumpellianus Scribn. var. Pumpellianus and Bromus Pumpellianus Scribn. var. villosissimus Hult.)

Nushagak Peninsula

TNWR Mount: Nushagak Peninsula, H. Johnson, Aug 93 (Determined as Bromopsis pumpelliana Holub by Russian botanist E. Maricheva in 1995. Mount has only spikes and culms.)Hordeum brachyantherum Nevski Meadow Barley

Kanakanak

TNWR Mount: Dillingham, TNWR Bunkhouse, P. Caswell, 24 Jul 92

UA Specimen: Dillingham, TNWR Bunkhouse, P. Caswell, 24 Jul 92 (Specimen was determined by C. Parker - but as the spike was badly fragmented, it probably was not mounted.)

Leymus mollis (Trin.) Hara Lyme Grass, Beach Grass, Beach Rye Grass, Dune Grass

Kanektok River, Quinhagak beach, Goodnews River, Cape Newenham, Cape Peirce,

Nanavochtshak Lake, Togiak Lake, Togiak River, Togiak, Four miles west of Cape Constantine, Banding Lake, Igushik River

UA Mount: Cape Peirce, P. Caswell, 18 Jul 92  
Cape Peirce, L. Schandelmeier, 15 Aug 73  
Togiak, O. W. Geist, 1933

Leymus mollis (Trin.) Hara subsp. mollis Lyme Grass, Beach Grass, Beach Rye Grass, Dune Grass

(Shown in Hulten as Elymus arenarius L. subsp. mollis (Trin.) Hult. var. mollis)

Kanektok River, Cape Peirce (LH), Nanavochtshak Lake, Togiak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake (WK)

Hulten indicates collection near Goodnews.

TNWR Mount: Cape Peirce, P. Caswell, 13 Jul 92  
Banding Lake, W. Kirk, Oct 90 (Det. S. Talbot as E. mollis Trin. (Leymus mollis (Trin.) Pilg.) (2 mounts)

Leymus mollis (Trin.) Hara subsp. villosissimus (Scribn.) A. Loeve Lyme Grass, Beach Grass, Beach Rye Grass, Dune Grass

(Shown in Hulten as Elymus arenarius L. subsp. mollis (Trin.) Hult. var. villosissimus (Scribn.) Hult.)

Quinhagak beach, Goodnews River, Cape Newenham, Igushik River

TNWR Mount: Igushik River, P. Caswell, 27 Jul 94  
UA Mount: Igushik River, P. Caswell, 27 Jul 94 (UA listed subspecies.)  
Cape Newenham, P. Caswell, 29 Jun 95

#### CYPERACEAE (Sedge Family)

Eriophorum angustifolium Honck. Tall Cotton Grass

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, Slug Mountain, High Lake, Nanavochtshak Lake, Togiak Lake, Pond between Ongivinuck River and Pungokepuk Lake, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak, Heart Lake

UA Mount: Heart Lake, P. Caswell, 6 Aug 94  
Cape Peirce, L. S. Dick, 28 Jun 70  
Kanakanak, O. W. Geist, 1933

Eriophorum angustifolium Honck. subsp. subarcticum (Vassiljev)  
Hult. Tall Cotton Grass

Kagati Lake, Kanektok River, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake,

Nanavochtshak Lake, Togiak Lake, Pond between Ongivinuck River and Pungokepuk Lake, Banding Lake (WK), Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak, Heart Lake

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, P. Caswell, 14 Jul 92  
 Kagati Lake, P. Caswell, 20 Jun 92  
 Kanektok River - 24 miles upstream from  
 Quinhagak, P. Caswell, 27 Jul 92 (Lowest peduncle is somewhat  
 scabrous, but others are glabrous)  
 Banding Lake, W. Kirk, Oct 90 (Det. A. Batten)  
 Banding Lake, H. Johnson, 1994  
 Banding Lake, H. Johnson, 1993  
 Kikertalik Lake, H. Johnson, 1993

UA Mount: Kanektok River, P. Caswell, 26 Jul 92 (UA listed subspecies.)  
 Cape Peirce, P. Caswell, 7 Jul 92 (UA listed subspecies.)  
 Kagati Lake, P. Caswell, 20 Jun 92 (UA listed subspecies.)

Eriophorum angustifolium Honck. subsp. subarcticum (Vassiljev)  
 Hult. var. coloratum Hult. Tall Cotton Grass, Pinkish Cotton Grass

Cape Peirce, Kanakanak

TNWR Mount: Cape Peirce, P. Caswell, 6 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 7 Jul 92 (UA listed subspecies and "pinkish  
 colored bristles.")  
 HH Mount: Cape Peirce, P. Caswell, 5 Jul 92

Eriophorum angustifolium Honck. subsp. scabriusculum Hult. Tall Cotton Grass, Pinkish  
 Cotton Grass

Kanektok River, Cape Newenham

TNWR Mount: Cape Newenham, P. Caswell, 14 Jun 95

Eriophorum angustifolium Honck. subsp. triste (T. Fries) Hult. Tall Cotton Grass  
 Nimgun Lake, Cape Newenham (LH & LJ), Cape Peirce, Slug Mountain, Heart Lake

Lipkin recorded Eriophorum triste (Th. Fries) Hadac & A. Loeve at Cape Newenham.

TNWR Mount: Cape Newenham, L. Haggblom and L. Jemison, 4 Jul 93  
 Heart Lake, P. Caswell, 6 Aug 94  
 UA Mount: Heart Lake, P. Caswell, 6 Aug 94 (UA did not list subspecies.)

Eriophorum scheuchzeri Hoppe Alaska Cotton, White Cotton Grass  
 (Kartesz does not recognize varieties Scheuchzeri and tenuifolium Ohwi)

Cape Newenham, Cape Peirce, Pond between Ongivinuck River and Pungokepuk Lake,  
 Tuklung Lake, Banding Lake, Snake River area, Heart Lake

- TNWR Mount: Heart Lake, P. Caswell, 6 Aug 94  
Dillingham - tundra between downtown and Windmill Hill,  
P. Caswell, 5 Jun 93
- UA Mount: Snake River area - 24 km southwest of Dillingham, D. Mesiar, 12  
Jun 79  
Dillingham - tundra between downtown and Windmill Hill, P.  
Caswell, 5 Jun 93 (Verified by C. Parker and listed as var.  
tenuifolium))
- HH Mount: Tuklung Lake, P. Caswell, 22 Jul 94  
Dillingham - tundra between downtown and Windmill Hill, P.  
Caswell, 5 Jun 93

Eriophorum russeolum E. Fries Russet Cotton Grass

Kagati Lake (BK), Kanektok River, Nimgun Lake, Cape Peirce (LH), Slug Mountain, High Lake, Nanavochtshak Lake, Togiak River, Banding Lake, Kikertalik Lake, Igushik River

TNWR Mounts of Eriophorum russeolum (subspecies or variation not determined):  
Nushagak Peninsula, H. Johnson, Aug 93 (2 mounts)  
Banding Lake, Heather Johnson, Aug 93

UA Mounts of Eriophorum russeolum (subspecies or variation not listed):  
Kanektok River, P. Caswell, 27 Jul 92  
Cape Peirce, P. Caswell, 14 Jul 92  
Cape Peirce, L. S. Dick, 9 Jun 70  
Nanvak Bay, L. S. Dick, 25 Jun 70  
Kagati Lake, P. Caswell, 20 Jun 92

Eriophorum russeolum E. Fries var. majus Sommier Russet Cotton Grass

Kagati Lake (BK), Kanektok River, Cape Peirce (LH), Slug Mountain, High Lake, Nanavochtshak Lake, Togiak River, Banding Lake, Kikertalik Lake

TNWR Mount: Cape Peirce, Lisa Haggblom, 26 Jul 89  
Kagati Lake, B. Kaplin, 12 Jul 86  
Cape Peirce, P. Caswell, 7 Jul 92

Eriophorum russeolum E. Fries var. albidum Nyl. Russet Cotton Grass, Pale Russet Cotton Grass

Kagati Lake, Nimgun Lake, Cape Peirce, Togiak River, Banding Lake, Kikertalik Lake, Igushik River

TNWR Mount: Nimgun Lake, P. Caswell, 24 Jun 94  
Banding Lake, H. Johnson, Aug 93

Eriophorum chamissonis C. A. Mey. Cotton Grass

(Shown in Hulten as Eriophorum russeolum E. Fries subsp. rufescens (Anders.) Hyl.)

Kagati Lake, Nimgun Creek, Cape Newenham, Cape Peirce, Nanavochtshak Lake, Tuklung Lake (HJ), Kanakanak

TNWR Mount: Kagati Lake, P. Caswell, 28 Jun 92

Eriophorum vaginatum L. Hare's Tail Grass, Tussock Cotton Grass

Kanektok River, Cape Newenham, Cape Peirce, Slug Mountain, Nanavochtshak Lake, Kanakanak

UA Mount: Cape Newenham, P. Caswell, 18 Jun 95  
Cape Peirce, P. Caswell, 5 Jul 92  
Cape Peirce, L. S. Dick, 27 Jun 70  
Kanakanak, O. W. Geist, 1933

Eriophorum vaginatum L. var. vaginatum Hare's Tail Grass, Tussock Cotton Grass  
(Shown in Hulten as subsp. vaginatum)

Kanektok River, Cape Newenham, Cape Peirce, Slug Mountain, Nanavochtshak Lake, Kanakanak

TNWR Mount: Cape Peirce, P. Caswell, 6 Jul 92

Eriophorum vaginatum L. var. spissum (Fern.) Boivin Hare's Tail Grass, Tussock Cotton Grass  
(Shown in Hulten as Eriophorum vaginatum L. subsp. spissum (Fern.) Hult.)

Cape Newenham

TNWR Mount: Cape Newenham, P. Caswell, 18 Jun 95  
HH Mount: Cape Newenham, P. Caswell, 18 Jun 95

Scirpus cespitosus L. Tufted Club Rush  
(Shown in Hulten as Tricophorum caespitosum (L.) Hartm.)

Kagati Lake (Dr. Lipkin), Kanektok River, Nimgun Lake, Nimgun Creek, Security Cove, High Lake, Banding Lake, Kikertalik Lake, Tuklung Lake, Kanakanak, Heart Lake

Lipkin reports Tricophorum caespitosum at Kagati Lake.

TNWR Mount: Lake Kikertalik, P. Caswell, 20 Aug 92  
UA Mount: Kanektok River, P. Caswell, 27 Jul 92

Eleocharis acicularis (L.) Roem. & Schult. Needle Spikerush

Nanavochtshak Lake, Togiak River, Banding Lake

TNWR Mount: Nanavochtshak Lake, P. Caswell, 10 Aug 92  
UA Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92

HH Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92

Kobresia myosuroides (Vill.) Fiori & Paol. Kobresia, Bellard's Kobresia

Kagati Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Kagati Lake, P. Caswell, 29 Jun 92

UA Mount: Kagati Lake, P. Caswell, 23 Jun 92

HH Mount: Kagati Lake, P. Caswell, 29 Jun 92

Carex gynocrates Wormsk. ex Drej. Northern Bog Sedge, Yellow Bog Sedge  
(Shown in Hulten as Carex dioica L. subsp. gynocrates (Wormsk.) Hult.)

Nimgun Lake, Cape Newenham, High Lake

Reported by Dick (Schandelmeier) in the valley two miles southeast of Slug Mountain.

UA Mount: Nimgun Lake, P. Caswell, 18 Jun 94 (UA listed subspecies.)

Carex scirpoidea Michx. Two Plant Sedge, Canadian Single Spike Sedge

Kagati Lake, Kanektok River (RM57), Nimgun Lake, Slug Mountain, High Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Kagati Lake, P. Caswell, 22 Jun 92

UA Mount: Kagati Lake, P. Caswell, 22 Jun 92

Carex rupestris All. Tiny Mountain Sedge, Curly Sedge

Kagati Lake (Dr. Lipkin)

Recorded by Lipkin at Kagati Lake.

Carex anthoxanthea Presl Slender Sedge

Cape Newenham, Cape Peirce, High Lake, Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 4 Aug 94

UA Mount: Heart Lake, P. Caswell, 4 Aug 94

Cape Peirce, L. S. Dick, 28 Jul 70

Carex circinnata C. A. Mey. Coiled Sedge

Cape Newenham

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Cape Newenham, P. Caswell, 5 Aug 95  
 UA Specimen: Cape Newenham, P. Caswell, 5 Aug 95  
 HH Mount: Cape Newenham, P. Caswell, 5 Aug 95

Carex pyrenaica Wahlenb. subsp. micropoda (C. A. Mey.) Hult. Snow-bed Sedge, Pyrenian Sedge

(UA Museum calls this taxon Carex micropoda C. A. Mey.)

Nimgun Lake, Cape Newenham, Kashaik Mountain, Heart Lake (A Kashaik Mountain specimen was identified by Carolyn Parker, UA Museum. Specimens differ from Hulten's description, as most have three stigmas.)

TNWR Mount: Kashaik Mountain, P. Caswell, 2 Aug 92  
 UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92  
 UA Specimen: Cape Newenham, P. Caswell, 26 Jun 95

Carex chordorrhiza Ehrh. Creeping Sedge

Kikertalik Lake, Tuklung Lake, Igushik River  
 TNWR Mount: Kikertalik Lake, P. Caswell, 19 Jul 94  
 UA Mount: Kikertalik Lake, P. Caswell, 19 Jul 94

Carex macrocephala Willd. Large-head Sedge

Four miles west of Cape Constantine

TNWR Mount: Four miles west of Cape Constantine, P. Caswell, 28 Jul 94  
 UA Mount: Four miles west of Cape Constantine, P. Caswell, 28 Jul 94  
 HH Mount: Four miles west of Cape Constantine, P. Caswell, 28 Jul 94

Carex pachystachya Cham. ex Steud. Thick-Headed Sedge

(Shown in Hulten as Carex macloviana d'Urv. subsp. pachystachya (Cham.) Hult.)

Togiak River, Heart Lake

TNWR Mount: Togiak River - between 20 and 32 miles upstream from Togiak village, P. Caswell, 3 Aug 92.  
 UA Mount: Togiak River, P. Caswell, 3 Aug 92

Carex bipartita All. Hare's Foot Sedge, Two Parted Sedge

(Shown in Hulten as Carex Lachenalii Schkuhr)

Kagati Lake (Dr. Lipkin), Cape Newenham, Cape Peirce, High Lake, Kashaik Mountain, Nanavochtshak Lake, Heart Lake

Recorded by Lipkin at Kagati Lake and Cape Newenham.

TNWR Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92  
 UA Mount: Heart Lake, P. Caswell, 12 Aug 94  
 UA Specimen: Cape Peirce, P. Caswell, 8 Aug 95

Cape Newenham, P. Caswell, 29 Jun 95

Carex glareosa Wahlenb. subsp. glareosa Clustered Sedge

Quinhagak beach, Nanvak Bay

TNWR Mount: Cape Peirce, P. Caswell, 11 Jul 92

UA Mounts (subspecies not listed):

Cape Peirce, P. Caswell, 19 Jul 92

Cape Peirce, L. S. Dick, 7 Jun 70

Cape Peirce, L. Schandelmeier, 24 Jun 70

HH Mount:

Cape Peirce, P. Caswell, 11 Jul 92

Carex mackenziei Krecz.

Cape Peirce

TNWR Mount: Cape Peirce, P. Caswell, 8 Jul 92

UA Mount: Cape Peirce, P. Caswell, 8 Jul 92

HH Mount: Cape Peirce, P. Caswell, 8 Jul 92

Carex canescens L. Silvery Sedge

Kanektok River, Nimgun Creek, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak River, Kikertalik Lake, Tuklung Lake (HJ), Igushik River, Heart Lake, Milk Creek

TNWR Mount: Kanektok River, P. Caswell, 25 Jul 92

Tuklung Lake, H. Johnson, 1994 (2 mounts)

UA Mount: Togiak River, P. Caswell, 3 Aug 92

Carex brunnescens (Pers.) Poir. Brownish Sedge

Kanektok River (RM46), High Lake, Togiak River, Tuklung Lake, Igushik River, Heart Lake, Milk Creek

UA Mount: Tuklung Lake, P. Caswell, 22 Jun 94

Carex brunnescens (Pers.) Poir. subsp. alaskana Kalela Brownish Sedge

Kanektok River (RM46), High Lake

TNWR Mount: High Lake, P. Caswell, 22 Jul 95

UA Specimen: High Lake, P. Caswell, 20 Jul 95

Kanektok River (RM46), P. Caswell, 26 Aug 95

Carex brunnescens (Pers.) Poir. subsp. pacifica Kalela Brownish Sedge

Tuklung Lake, Igushik River

TNWR Mount: Tuklung Lake, P. Caswell, 22 Jul 94

Togiak River - 20 to 32 miles upriver from Togiak village, P. Caswell, 3 Aug 92

HH Mount: Tuklung Lake, P. Caswell, 22 Jul 94

Carex disperma Dew. Soft-leaved Sedge

Igushik River

TNWR Mount: Igushik River, P. Caswell, 26 Jul 94

UA Mount: Igushik River, P. Caswell, 26 Jul 94

HH Mount: Igushik River, P. Caswell, 26 Jul 94

Carex loliacea L. Slender Yellow-green Bog Sedge

High Lake, Igushik River

TNWR Mount: High Lake, P. Caswell, 25 Jul 95

UA Specimen: High Lake, P. Caswell, 25 Jul 95

HH Mount: Igushik River, P. Caswell, 26 Jul 94

Carex bigelowii Torr. ex Schwein. Bigelow Sedge

(Shown in Hulten as Carex Bigelowii Torr.)

Kagati Lake, Kanektok River (RM49), Nimgun Creek, Goodnews River (RM36) (KN & SH), Cape Newenham, Cape Peirce, High Lake, Togiak River, Kashaiak Mountain, Pond between Ongivinuck River and Pungokepuk Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak, Heart Lake

TNWR Mount: Pond between Ongivinuck River and Pungokepuk Creek, P. Caswell, 6 Aug 92

UA Mount: Cape Peirce, P. Caswell, 3 Jul 92

Cape Peirce, L. Schandelmeier, 6 Jul 70

Kagati Lake, E. Hulten, 12 Sep 65

Carex eleusinoides Turcz. Gravel Bar Sedge, Goose Sedge

Nimgun Creek, High Lake

TNWR Mount: Nimgun Creek, P. Caswell, 30 Jun 94

UA Mount: Nimgun Creek, P. Caswell, 30 Jun 94

Carex lenticularis Michx. var. lipocarpa (Holm) L. A. Standley Kellogg's Sedge

(Shown in Hulten as Carex Kelloggii W. Boott)

Kagati Lake, Kanektok River, Nimgun Creek, Cape Newenham, High Lake, Togiak River, Heart Lake

TNWR Mount: Togiak River - ponds near "Big Bend" upriver from Pungokepuk Creek, P. Caswell, 13 Aug 92

UA Mount: Togiak River, P. Caswell, 13 Aug 92

Carex aquatilis Wahlenb. var. aquatilis Water Sedge  
(Shown in Hulten as subsp. aquatilis)

Kagati Lake, Kanektok River, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Togiak River, Pond between Ongivinuck River and Pungokepuk Lake, Four miles west of Cape Constantine, Banding Lake (WK), Kikertalik Lake (HJ), Tuklung Lake (HJ), Igushik River, Kanakanak, Heart Lake

Hulten indicates collection at Cape Newenham.  
Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Pond between Ongivinuk River and Pungokepuk Lake,  
P. Caswell, 5 Aug 92  
Banding Lake, W. Kirk, Sep 88 (Det. A. Batten)  
Kikertalik Lake, H. Johnson, 1994  
Nushagak Peninsula, H. Johnson, 1994  
UA Mount: Kanektok River, P. Caswell, 26 Jul 92  
Togiak River, P. Caswell, 5 Aug 92  
Cape Peirce, L. Schandelmeier, 11 Jul 70

Carex aquatilis Wahlenb. var. dives (Holm) Kuekenth Sitka Sedge  
(Shown in Hulten as Carex sitchensis Prescott)

Kanektok River, Cape Peirce, Tuklung Lake

Recorded by Lipkin as a probable determination at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 17 Jul 92  
UA Mount: Kanektok River, P. Caswell, 29 Jul 92

Carex ramenskii Kom. Coastal Marsh Sedge

Quinhagak beach, Cape Peirce

TNWR Mount: Cape Peirce, P. Caswell, 13 Jul 92  
UA Mount: Cape Peirce, P. Caswell, 11 Jul 92  
HH Mount: Cape Peirce, P. Caswell, 13 Jul 92

Carex lyngbyaei Hornem. Lyngbye Sedge

Kanektok River, Quinhagak beach, Arolik River (A. Archibeque and R. MacD.), Cape Newenham, Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak

Hulten indicates collection at Cape Newenham.  
Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92  
UA Mount: Cape Peirce, P. Caswell, 10 Jul 92  
Cape Peirce, L. S. Dick, 28 Jun 70

Kanektok River, P. Caswell, 26 Jul 92

Carex norvegica Retz. subsp. inferalpina (Wahlenb.) Hulten Scandanavian Sedge  
(Shown in Hulten as Carex media R. Br.)

Kanektok River, Nimgun Creek, Cape Newenham, Cape Peirce, Slug Mountain, High Lake, Togiak River, Heart Lake, Milk Creek

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92  
UA Mount: Slug Mountain, P. Caswell, 15 Jul 92  
Cape Peirce, P. Caswell, 11 Jul 92  
Kanektok River, P. Caswell, 26 Jul 92  
Togiak River, P. Caswell, 5 Aug 92

Carex stylosa C. A. Mey. Variegated Sedge, Long Styled Sedge

Cape Peirce, Togiak River

TNWR Mount: Pond near "Big Bend" on Togiak River, P. Caswell, 13 Aug 92  
UA Mount: Pond near "Big Bend" on Togiak River, P. Caswell, 13 Aug 92  
Cape Peirce, P. Caswell, 13 Jul 92

Carex gmelini Hook. & Arn. Gmelin Sedge

Kanektok River, Cape Newenham, Cape Peirce, Togiak Lake, Four miles west of Cape Constantine, Tuklung Lake, Igushik River

Hulten indicates collection at Cape Newenham.  
Collected by Dick at Cape Peirce.

TNWR Mount: Cape Peirce, P. Caswell, 13 Jul 92  
UA Mount: Cape Peirce, P. Caswell, 8 Jul 92  
Cape Peirce, L. Schandelmeier, 24 Jun 70  
Togiak Lake, M. Dick, 3 Aug 73  
HH Mount: Cape Peirce, P. Caswell, 13 Jul 92

Carex macrochaeta C. A. Mey. Long-awn Sedge, Alaska Long-awned Sedge

Cape Newenham, Cape Peirce, Nanavochtshak Lake, Kashaik Mountain

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Kashaik Mountain, P. Caswell, 2 Aug 92  
UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92  
Cape Newenham, P. Caswell, 29 Jun 95  
Cape Peirce, L. Schandelmeier, 26 Jun 70

Carex podocarpa C. B. Clarke Short-stalked Sedge

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape

Peirce, Slug Mountain, High Lake, Nanavochtshak Lake, Kashaik Mountain, Heart Lake

Hultten indicates collection at Cape Newenham.

TNWR Mount: Kagati Lake, P. Caswell, 24 Jun 92  
 UA Mount: Cape Peirce, P. Caswell, 9 Jul 92  
 Cape Peirce, L. Schandelmeier, 11 Jun 73

Carex spectabilis Dew. Showy Sedge

Tuklung Lake

TNWR Mount: Tuklung Lake, Nushagak Peninsula, H. Johnson, 21 Jul 93

Carex microchaeta Holm Short-stalk Sedge

Kagati Lake, Kanektok River, Cape Newenham (LH & LJ), Cape Peirce, High Lake, Togiak River, Pond between Ongivinuck River and Pungokebuk Lake, Kanakanak, Heart Lake

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, P. Caswell, 9 Jul 92  
 Cape Newenham, L. Hagglom & L. Jemison, 23 Jun 93  
 UA Mount: High Lake, P. Caswell, 18 Jul 95  
 UA Specimen: Cape Newenham, P. Caswell, 8 Jul 95

Carex microchaeta Holm subsp. nesophila (Holm) E. Murr. Bering Sea Sedge  
 (Shown in Hultten as Carex nesophila Holm. In his supplement, Hultten states this taxon was transferred to Carex microchaeta subsp. nesophila by Murray in 1970.)

Kanektok River, Cape Newenham, Cape Peirce, High Lake, Kashaik Mountain, Banding Lake (WK), Kikertalik Lake (WK), Tuklung Lake (WK)

Recorded by Lipkin at Cape Newenham (Det. By D. F. Murray)  
 Hultten indicates collection at Cape Newenham  
 Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Tuklung Lake, W. Kirk, Aug 91 (det. D. Murray) (2 mounts)  
 Banding Lake, W. Kirk, Aug 90 (det. A. Batten)  
 Kikertalik Lake, W. Kirk, Aug 90 (det. D. Murray)  
 UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

Carex rariflora (Wahlenb.) J. E. Sm. Loose Flowered Sedge, Few Flowered Sedge

Nimgun Creek, Cape Newenham, Cape Peirce, Pond between Ongivinuck River and Pungokebuk Creek, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Heart Lake

Recorded by Lipkin at Cape Newenham.  
 Hulten indicates collection at Cape Newenham.  
 Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, P. Caswell, 3 Jul 92  
 Pond between Ongivinuck River and Pungokepuk Creek, P.  
 Caswell, 5 Aug 92  
 UA Specimen: Nimgun Creek, P. Caswell, 4 Jul 94  
 Cape Newenham, P. Caswell, 29 Jun 95

Carex pluriflora Hult. Many-flower Sedge

Quinhagak beach, Nimgun Lake, Cape Newenham, Cape Peirce, Togiak River, Kashaik Mountain, Four miles west of Cape Constantine, Kikertalik Lake, Tuklung Lake

TNWR Mount: Banding Lake, P. Caswell, 18 Jul 94  
 UA Mount: Quinhagak beach, P. Caswell, 28 Jul 92  
 Kashaik Mountain, P. Caswell, 2 Aug 92 (Need to check this  
 mount, as the HH Mount for the same date and location turned  
 out to be Carex podocarpa.)  
 Tuklung Lake, P. Caswell, 22 Jul 94

Carex limosa L. Shore Sedge

Cape Newenham, Togiak River, Igushik River, Heart Lake

TNWR Mount: Pond near "Big Bend" in Togiak River, P. Caswell, 4 Aug 92  
 UA Mount: Togiak River, P. Caswell, 4 Aug 92  
 UA Spec: Cape Newenham, P. Caswell, 9 Jul 95

Carex magellanica Lam. subsp. irrigua (Wahlenb.) Hult. Bog Sedge

Igushik River

UA Specimen: Igushik River - lower part, P. Caswell, 26 Jul 94

Carex livida (Wahlenb.) Willd. Livid Sedge

Kagati Lake

Recorded by Lipkin at Kagati Lake.

Carex misandra R. Br. Short-leaf Sedge

Cape Newenham, Cape Peirce, High Lake

TNWR Mount: Cape Peirce, P. Caswell, 7 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 7 Jul 92  
 High Lake, P. Caswell, 18 Jul 95  
 HH Mount: Cape Peirce, P. Caswell, 7 Jul 92

Carex capillaris L.(Kartesz includes var. major in this taxon.)

Kanektok River (RM46), High Lake

TNWR Mount: High Lake, P. Caswell, 1 Aug 95

UA Mount: High Lake, P. Caswell, 1 Aug 95

HH Mount: High Lake, P. Caswell, 2 Aug 95

Carex rostrata Stokes Beaked Sedge(A portion of this taxon has been moved to Carex utriculata Boott. This taxon is now limited to plants with leaves 1.5 to 4 mm wide and having papillae.)

Nanavochtshak Lake, Togiak River

TNWR Mount: Pond near "Big Bend" in Togiak River, P. Caswell, 4 Aug 92

UA Mount: Togiak River, P. Caswell, 4 Aug 92

Nanavochtshak Lake, P. Caswell, 10 Aug 92

Carex utriculata Boott Beaked Sedge(Shown in Hulten as Carex rhynchophysa C. A. Mey. Carex utriculata includes specimens earlier considered to be part of Carex rostrata, but having broader leaves, 5 to 12 mm, and no papillae on leaves - except faintly at tips.)

Kanektok River, High Lake, Togiak River, Tuklung Lake, Heart Lake

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92

Kanektok River (RM24), P. Caswell, 20 Aug 94

UA Mount: Kanektok River, P. Caswell, 26 Jul 92

Togiak River, P. Caswell, 3 Aug 92

Kanektok River (RM24), P. Caswell, 20 Aug 94

Carex saxatilis L. var. saxatilis Common Sedge, Russet Sedge(Shown in Hulten as Carex saxatilis L. subsp. laxa (Trautv.) Kalela)

Kagati Lake, Kanektok River, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Togiak River, Tuklung Lake, Heart Lake

TNWR Mount: Cape Peirce, P. Caswell, 17 Jul 92

Pond near "Big Bend" in Togiak River, P. Caswell, 4 Aug 92

Togiak River - ponds near "Big Bend" on river upstream from Pungokebuk Creek, P. Caswell, 13 Aug 92

UA Mount: Cape Peirce, P. Caswell, 17 Jul 92

Kanektok River, P. Caswell, 26 Jul 92

HH Mount: Togiak River - ponds near "Big Bend" on river upstream from Pungokebuk Creek, P. Caswell, 13 Aug 92

Carex rotundata Wahlenb. Gray-green Water Sedge

Kanektok River, Nimgun Lake, Cape Newenham, Togiak River, Pond between Ongivinuk River and Pungokepok Creek, Banding Lake, Kikertalik Lake, Tuklung Lake (HJ), Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Togiak River - ponds near "Big Bend" upriver from Pungokepok Creek, P. Caswell, 4 Aug 92  
 Tuklung Lake, H. Johnson, 1994 (2 mounts)  
 Nushagak Peninsula, H. Johnson, Aug 93 (2 mounts)

UA Mount: Kanektok River, P. Caswell, 27 Jul 92  
 Cape Newenham, E. Hulten, 13 Sep 65

Carex membranacea Hook. Fragile Sedge

Kanektok River, Cape Newenham, Cape Peirce, High Lake, Heart Lake

TNWR Mount: Cape Peirce, P. Caswell, 7 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 7 Jul 92

JUNCACEAE (Rush Family)

Juncus filiformis L. Thread Rush

Kanektok River, Quinhagak Airport, Cape Newenham (Dr. Lipkin), Cape Peirce, Nanavochtshak Lake, Togiak River, Kikertalik Lake, Tuklung Lake

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 12 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 10 Jul 92  
 Cape Peirce, L. Schandelmeier, 8 Jul 70

Juncus haenkei E. Mey. Arctic Rush

(Shown in Hulten as Juncus arcticus Willd. subsp. sitchensis Engelm.)

Cape Peirce (LH), Nanavochtshak Lake, Four miles west of Cape Constantine

TNWR Mount: Cape Peirce, P. Caswell, 13 Jul 92  
 Cape Peirce, Lisa Haggblom, 26 Jul 89

UA Mount: Cape Peirce, P. Caswell, 13 Jul 92  
 (UA Museum listed subspecies.)  
 Cape Peirce, L. Schandelmeier, 21 Jun 70  
 (UA Museum did not list subspecies.)

HH Mount: Cape Peirce, P. Caswell, 13 Jul 92

Juncus drummondii E. Mey. Drummond Rush

Cape Newenham, Kashaik Mountain, Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 6 Aug 94

Juncus mertensianus Bong. Mertens Rush

Kanektok River (RM57), Nanavochtshak Lake, Heart Lake

TNWR Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92

UA Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92

Juncus castaneus Sm. subsp. castaneus Chestnut Rush

Kanektok River, Arolik River (A. Archibeque & R. MacD.), Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak River, Kanakanak, Heart Lake

Collected by Dick (Schandelmeier) along northeast shore of Nanvak Bay.

TNWR Mount: Quinhagak, P. Caswell, 28 Jul 92

UA Mount: Cape Peirce, P. Caswell, 19 Jul 92  
(UA did not list subspecies.)

Cape Peirce, L. Schandelmeier, 24 Jul 70  
(UA did not list subspecies.)

Juncus alpinoarticulatus Chaix subsp. nodulosus (Wahlenb.) Haemet-Ahti Alpine Rush, Northern Rush

(Shown in Hulten as Juncus alpinus Vill. (in broad sense))

Kanektok River, Togiak River, Banding Lake

TNWR Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92

UA Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92 (UA did not list subspecies.)

HH Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92

Juncus albescens (Lange) Fern. Three-flowered Rush

(Shown in Hulten as Juncus triglumis L. subsp. albescens (Lange) Hult.)

Cape Newenham, Cape Peirce, Lake Kikertalik

TNWR Mount: Cape Newenham, P. Caswell, 5 Jul 95

UA Mount: Cape Peirce, P. Caswell, 11 Jul 92

HH Mount: Cape Peirce, P. Caswell, 11 Jul 92

Juncus biglumis L. Two-flowered Rush

Kanektok River, Cape Newenham, Cape Peirce, Slug Mountain, High Lake, Kashaik Mountain, Kikertalik Lake, Tuklung Lake

TNWR Mount: Cape Peirce (Nanvak Bay), P. Caswell,  
6 Jul 92  
 UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92  
 Cape Peirce, P. Caswell, 6 Jul 92  
 Slug Mountain, L. Schandelmeier, 28 Jul 70

Juncus bufonius L. Toad Rush

Quinhagak beach, gas station at mouth of Kanektok River, Shannon's Pond

TNWR Mount: Quinhagak beach, Rob Doyle, 29 Jul 92  
 UA Mount: Quinhagak beach, Rob Doyle, 29 Jul 92  
 HH Mount: Quinhagak beach, Rob Doyle, 29 Jul 92

Luzula rufescens Fisch. Hairy Woodrush

Nimgun Creek, Cape Newenham, Cape Peirce

TNWR Mount: Nimgun Creek, P. Caswell, 5 Jul 94  
 UA Mount: Cape Peirce, mountains northeast of camp, L. Schandelmeier,  
28 Jul 70 (In her report Schandelmeier states she found Luzula  
rufescens on Slug Mountain.)  
 Cape Newenham, P. Caswell, 8 Jul 95  
 HH Mount: Nimgun Creek, P. Caswell, 5 Jul 94

Luzula wahlenbergii Rupr. Wahlenberg Woodrush

(Shown in Hulten as Luzula Wahlenbergii Rupr. subsp. Wahlenbergii)  
 Kanektok River, Cape Newenham, Cape Peirce, Igushik River

TNWR Mount: Kanektok River, P. Caswell, 20 Aug 94  
 UA Spec: Cape Newenham, P. Caswell, 23 Jun 95  
 HH Mount: Cape Peirce, P. Caswell, 14 Jul 92

Luzula piperi (Coville) M. E. Jones

(Shown in Hulten as Luzula Wahlenbergii Rupr. subsp. Piperi (Cov.) Hult.)

Cape Peirce, Kashaik Mountain

Reported by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, P. Caswell, 17 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 17 Jul 92 (UA did not list subspecies.)  
 Cape Peirce, L. Schandelmeier, 28 Jun 70 (UA listed L.  
wahlenbergii, but Schandelmeier mentioned subsp. piperi in her  
report.)  
 HH Mount: Cape Peirce, P. Caswell, 4 Jul 92

Luzula parviflora (Ehrh.) Desv. Small-flowered Woodrush, Spreading Woodrush

Kagati Lake, Kanektok River, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake,

Nanavochtshak Lake, Kikertalik Lake, Heart Lake

Schandelmeier collected Luzula parviflora at Cape Peirce

UA Mounts of Luzula parviflora (subspecies not listed):

Cape Newenham, P. Caswell, 8 Jul 95

Cape Peirce, P. Caswell, 4 Jul 92

Cape Peirce, L. S. Dick, 16 Jul 70

Kagati Lake, E. Hulten, 12 Sep 65

Kanektok River, P. Caswell, 26 Jul 92

Luzula parviflora (Ehrh.) Desv. subsp. parviflora Small-flowered Woodrush

Kagati Lake, Kanektok River, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Kikertalik Lake, Heart Lake

Hulten indicates collection at Kagati Lake.

TNWR Mount: Cape Peirce, P. Caswell, 6 Jul 92

Luzula parviflora (Ehrh.) Desv. subsp. divaricata (S. Wats.) Hult. Small-flowered  
Woodrush

Kanektok River

TNWR Mount: Kanektok River - lower part, P. Caswell, 26 Jul 92

Luzula arcuata (Wahlenb.) Sw. subsp. arcuata Alpine Woodrush, Smooth Woodrush

Nimgun Lake, Cape Newenham, Slug Mountain, High Lake, Heart Lake (Some specimens at Nimgun Lake and Heart Lake appeared to be a transition between subspecies.)

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Newenham, P. Caswell, 24 Jun 95

UA Mount: Slug Mountain, P. Caswell, 15 Jul 92

(UA did not list subspecies.)

Cape Peirce, L. Schandelmeier, 28 Jun 70

(UA did not list subspecies.)

Luzula arcuata (Wahlenb.) Sw. subsp. unalaschcensis (Buchenau) Hult. Alpine Woodrush, Smooth Woodrush

Kagati Lake, Cape Newenham, High Lake, Nanavochtshak Lake, Kashaik Mountain, Heart Lake

Recorded by Lipkin at Kagati Lake and Cape Newenham.

TNWR Mount: Heart Lake, P. Caswell, 4 Aug 94

UA Mount: Nanavochtshak Lake, P. Caswell 9 Aug 92 (UA listed)

subspecies.)

Luzula arctica Blytt subsp. latifolia (Kjellm.) Porsild Tundra Woodrush  
(Shown in Hulten as Luzula tundricola Gorodk.)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Heart Lake

Hulten indicates collection at Cape Newenham.  
Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, P. Caswell, 16 Jul 92  
UA Mount: Cape Peirce, P. Caswell, 4 Jul 92 (Listed as L. tundricola)  
Cape Peirce, L. S. Dick, 16 Jul 70 (Listed as L. arctica)  
HH Mount: Cape Peirce, P. Caswell, 12 Jul 92

Luzula confusa Lindeb. Northern Woodrush

Nimgun Lake, Cape Newenham, High Lake, Heart Lake

TNWR Mount: Nimgun Lake, P. Caswell, 16 Jun 94  
Nimgun Lake, P. Caswell, 26 Jun 94  
HH Mount: Nimgun Lake, P. Caswell, 17 Jun 94

Luzula multiflora (Retz.) Lej. Multiflora Complex

Specimens belonging to the Luzula multiflora complex were collected at the following locales: Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce, High Lake, Nanavochtshak Lake, Togiak Lake, Togiak River, Kikertalik Lake, Tuklung Lake (HJ), Kanakanak, Heart Lake.

TNWR Mount of Luzula multiflora (subspecies not determined):  
Tuklung Lake, H. Johnson, Aug 93 (det. by E. Maricheva as  
Luzula capitata (Miq.) Kom.)

UA Mounts of Luzula multiflora (subspecies not listed):  
Cape Peirce, P. Caswell, 8 Jul 92  
Kikertalik Lake, P. Caswell, 20 Aug 92  
Cape Peirce, L. S. Dick, 22 Jun 70

Some specimens were identified to subspecies and variety as follows:

Luzula multiflora (Ehrh.) Lej. subsp. frigida (Buch.) Krecz. Many Flowered Wood Rush  
(Shown in Hulten as Luzula multiflora (Retz.) Lej. subsp. multiflora var. frigida  
(Buchenau) Sam.)

Cape Peirce, Kagati Lake, Nanavochtshak Lake, Kikertalik Lake

Hulten indicates collection at Cape Newenham.

Luzula multiflora (Ehrh.) Lej. subsp. multiflora var. kjellmanioides Taylor & MacBryde

(Shown in Hulten as Luzula multiflora (Retz.) Lej. subsp. multiflora var. Kjellmaniana (Miyabe & Kudo) Sam. UA Museum calls this taxon Luzula kjellmaniana Miyabe & Kudo.)

Cape Peirce, Togiak Lake, Togiak River

TNWR Mount: Togiak River, P. Caswell, 3 Aug 92  
 UA Mount: Kanektok River, several miles upstream from Quinhagak, P. Caswell, 25 Jul 92  
 Cape Peirce, L. S. Dick, 11 Jun 70

Luzula spicata (L.) DC. Nodding Wood Rush, Spiked Wood Rush

Cape Newenham (Dr. Lipkin)  
 Recorded by Lipkin at Cape Newenham.

#### LILIACEAE (Lily Family)

Tofieldia coccinea Richards. Northern False Asphodel, Northern Asphodel, False Asphodel

Kagati Lake, Kanektok River (RD and AW), Nimgun Lake, Nimgun Creek, Pyramid Mountain, Cape Newenham, Cape Peirce, High Lake, Banding Lake, Ridge west of Sunshine Creek, Heart Lake

Hulten indicates collections at Cape Newenham and near Chagvan Bay.  
 Collected by Dick (Schandelmeier) at base of Slug Mountain.

TNWR Mount: Cape Peirce, P. Caswell, 7 Jul 92  
 Banding Lake, W. Kirk, Oct 90 (det. S. Talbot)  
 UA Mount: Kagati Lake, P. Caswell, 24 Jun 92  
 Slug Mountain, L. S. Dick, 28 Jul 70

Tofieldia pusilla (Michx.) Pers. Scotch Asphodel, False Asphodel

Kanektok River (RM55 JC & JP) (RM57), Cape Newenham, High Lake

TNWR Mount: Kanektok River (RM55), J. Culbertson and J. Peirce, 29 Jun 95  
 UA Mount: Cape Newenham, P. Caswell, 3 Jul 95

Veratrum viride Ait. False Hellebore, American White Hellebore

(Shown in Hulten as Veratrum viride Ait. subsp. Eschscholtzii (Gray) Loeve & Loeve)

Kagati Lake, Kanektok River (RM57), Nimgun Lake, Nimgun Creek, High Lake, Nanavochtshak Lake, Togiak River, Kikertalik Lake, Tuklung Lake, Igushik River, Sunshine Creek

UA Mount: Kagati Lake, P. Caswell, 24 Jun 92

Fritillaria camschatcensis (L.) Ker-Gawl. Kamchatka Fritillary, Indian Rice, Black Lily, Chocolate

## Lily

Kanektok River (JC & JP), Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Newenham, Cape Peirce (LH), High Lake, Togiak Lake (BK), Togiak River (RJ), Kashaik Mountain, Snake River, Sunshine Creek

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Togiak River, Rebecca Joyce, 9 Jul 85  
Togiak Lake, B. Kaplin, 4 Jul 86  
TNWR Spec: Kanektok River, J. Culbertson, J. Peirce, Jul 95  
UA Mount: Cape Peirce, P. Caswell, 3 Jul 92  
Cape Peirce, L. S. Dick, 24 Jun 70  
Cape Peirce, L. S. Dick, 6 Jul 70  
Snake River area - 24 km southwest of  
Dillingham, D. Mesiar, 5 Jul 79

Lloydia serotina (L.) Rchb. Alp Lily

Kagati Lake, Kanektok River (RM50, RD & AW), Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (LJ), High Lake, Ridge west of Sunshine Creek, Heart Lake

Hulten indicates collection at Cape Newenham.  
Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, L. Jemison, 17 Jun 89  
UA Mount: Kagati Lake, P. Caswell, 14 Jun 92  
Nimgun Lake, P. Caswell, 15 Jun 94  
Cape Peirce, L. S. Dick, 13 Jun 70

Streptopus amplexifolius (L.) DC. Twisted Stalk, Watermelon Berry, Cucumber Root, Clasping Twisted Stalk

Nimgun Lake, Nimgun Creek, Goodnews Lake (BK), Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak River, Kikertalik Lake, Tuklung Lake (HJ), Igushik River, Kanakanak, Sunshine Creek

Hulten indicates collection at Cape Newenham.  
Collected by Dick (Schandelmeier) in valley two miles south-southeast of Slug Mountain.

TNWR Mount: Goodnews Lake, B. Kaplin, 21 Jul 86  
Tuklung Lake, H. Johnson, 1994 (2 mounts)  
UA Mount: Cape Peirce, L. S. Dick, 28 Jul 70

Streptopus streptopoides (Ledeb.) Frye & Rigg

Banding Lake

TNWR Mount: Banding Lake, P. Caswell, 18 Jul 94  
 HH Mount: Banding Lake, P. Caswell, 18 Jul 94

Note: HH Mount was donated to UA Museum by Hartwick College in spring 1996. It has not yet been verified or entered into the UA Museum computer.

#### IRIDACEAE (Iris Family)

Iris setosa Pallas ex Link var. setosa Wild Flag, Wild Iris  
 (Shown in Hulten as Iris setosa Pall. subsp. setosa)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Goodnews Lake (PG), Cape Newenham, Cape Peirce (LJ), High Lake, Nanavochtshak Lake, Togiak River, Four miles west of Cape Constantine, Kikertalik Lake, Tuklung Lake, Snake River, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Goodnews Lake, P. Greci, 31 Jul 86  
 UA Mount: Cape Peirce, L. Schandelmeier, 18 Aug 73  
 Cape Peirce, L. S. Dick, 7 Jul 70  
 Cape Newenham, E. Hulten, 13 Sep 45  
 Snake River area, D. Mesiar, 27 Jun 79

#### ORCHIDACEAE (Orchis Family)

Cypripedium guttatum Sw.

J. Culbertson reports a photo of Cypripedium guttatum hangs in the Togiak Fishing Adventures lodge. Allegedly the photo was taken in the vicinity of the lodge by a client photographer circa 1993. J. Culbertson has looked for a specimen on several occasions.

Coeloglossum viride (L.) Hartm. var. viriscens (Muhl. ex Willd.) Luer Long-bracted Bog-orchid, Frog Orchid (Shown in Hulten as Coeloglossum viride (L.) Hartm. subsp. bracteatum (Muhl.) Hult.)

Kagati Lake, Cape Peirce, Slug Mountain, High Lake, Banding Lake (HJ)

TNWR Mount: Kagati Lake, P. Caswell, 24 Jun 92  
 Banding Lake, H. Johnson, 1994  
 UA Mount: Slug Mountain, P. Caswell, 15 Jul 92 (UA listed subspecies)  
 Kagati Lake, P. Caswell, 24 Jun 92 (UA listed subspecies.)

Platanthera obtusata (Pursh) Lindl. Small Bog-orchid, One-leaf Rein Orchid

Cape Newenham, Cape Peirce, Slug Mountain  
 Recorded by Lipkin at Cape Newenham.  
 Collected by Dick (Schandelmeier) at Cape Peirce (Kitiwake Arch) and near base of Slug

Mountain.

TNWR Mount: Slug Mountain, P. Caswell, 15 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 13 Jul 92  
 Cape Peirce - base of Slug Mountain, L. S. Dick, 28 Jul  
 HH Mount: Cape Peirce, P. Caswell, 13 Jul 92

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Spiranthes romanzoffiana Cham. Hooded Ladies' Tresses

Goodnews Lake (SH), Togiak River, Four miles west of Cape Constantine, Banding Lake

TNWR Mount: Near "Big Bend" in Togiak River, P. Caswell, 5 Aug 92  
 UA Mount: Near "Big Bend" in Togiak River, P. Caswell, 5 Aug 92

Listera cordata (L.) R. Br. Heart-leaf Twayblade

Cape Newenham, High Lake, Heart Lake

TNWR Mount: Heart Lake, K. Schubeck, 12 Aug 94  
 UA Mount: Cape Newenham, P. Caswell, 29 Jun 95

Corallorrhiza trifida Chatelain Coral Root, Early Coral Root

Cape Newenham, Cape Peirce

TNWR Mount: Cape Newenham, P. Caswell, 29 Jun 95  
 (In crowberry on tundra near Air Force Cove.)  
 UA Mount: Cape Peirce, L. S. Dick, 3 Jul 70 (In her report, Schandelmeier states she collected it in thick wet moss of the saline marsh on the south shore of Nanvak Bay.)

SALICACEAE (Willow Family)

Populus balsamifera L. subsp. balsamifera Balsam Poplar, Cottonwood

Kagati Lake, Kanektok River, Nimgun Creek, Cape Newenham, High Lake, Nanavochtshak Lake, Togiak Lake, Togiak River, Sunshine Creek, Heart Lake

TNWR Mount: Cape Newenham, P. Caswell, 23 Jun 95  
 UA Mount: Cape Newenham, P. Caswell, 23 Jun 95

Salix reticulata L. subsp. reticulata Netted Willow, Net veined Willow, Netvein Willow, Netleaf Willow, Reticulated Willow

(This taxon includes former subspecies orbicularis (Anderss.) Flod. as well as former varieties gigantifolia Ball and semicalva Fern. Kartesz does not afford form villosa Kitamura the dignity of mention. Former taxa are shown below only to indicate appearances of netted willows found within the refuge.)

Kagati Lake, Kanektok River (RM49), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Heart Lake

TNWR Mount: Kagati Lake, P. Caswell, 28 Jun 92

HH Mount: Lake Nishlik - north of west end, P. Casweell,  
14 Jun 90

UA Mount: Kagati Lake, P. Caswell, 17 Jun 92 (Listed as subsp. reticulata)  
Cape Peirce, L. Schandelmeier, 19 Jun 73  
Cape Peirce, L. Schandelmeier, 12 Jun 73  
High Lake, P. Caswell, 19 Jul 95  
Cape Newenham, P. Caswell, 22 Jun 95  
Cape Peirce, L. Dick, 1970  
Cape Peirce, M. H. Dick, 12 Jun 73

Specimens fitting Hulten's description of Salix reticulata L. subsp. reticulata var. gigantifolia Ball were found at High Lake.

TNWR Mount: High Lake, P. Caswell, 19 Jul 95

Specimens fitting Hulten's description of Salix reticulata L. subsp. reticulata f. villosa Kitamura were found at Cape Newenham.

TNWR Mount: Cape Newenham, P. Caswell, 13 Jun 95

Specimens fitting Hulten's description of Salix reticulata L. subsp. orbicularis (Anderss.) Flod. were found at Cape Newenham and Cape Peirce (LH).

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Newenham, P. Caswell, 18 Jun 95

HH Mount: Cape Peirce, P. Caswell, 13 Jul 92

Salix polaris Wahlenb. Polar Willow, Snow-bed Willow

(Shown in Hulten as Salix polaris Wahlenb. subsp. pseudopolaris (Flod.) Hult.)

Kanektok River (RM57), Nimgun Lake, Cape Newenham, High Lake, Nanavochtshak Lake, Ridge west of Sunshine Creek, Heart Lake

TNWR Mount: Nimgun Lake, P. Caswell, 15 Jun 94

Salix phlebophylla Anderss. Skeleton Leaf Willow

Kagati Lake, Nimgun Lake, Pyramid Mountain, Kikertalik Lake, Ridge west of Sunshine Creek, Heart Lake

Hulten indicates a collection at the northeast edge of the refuge.

TNWR Mount: Lake Kikertalik, W. Kirk, Aug 90 (det. A. Batten)

UA Mount: Nimgun Lake, P. Caswell, 15 Jun 94

Salix rotundifolia Trautv. Least Willow

Ouchklune Range, Kanektok River (RM46), Cape Newenham, Pyramid Mountain, Cape Peirce, High Lake (This taxon is probably more widely distributed in the refuge than is suggested above. Oddly, I did not recognize the plant in the field until 1995, my last year of collecting.)

Hulten indicates collection at Cape Newenham.

In "Status Report on Artemisia glomerata var. subglabra Hult." Dr. Lipkin mentions S. rotundifolia as a common species at Cape Newenham and in the Ouchklune Range near Kagati Lake.

TNWR Mount: Pyramid Mountain, P. Caswell, 28 May 95

UA Mount: Cape Peirce, L. Dick, 1970

Salix arctica Pall. Arctic Willow

(Hulten shows three subspecies, arctica, crassijulis (Trautv.) Skvortz., and torulosa (Trautv.) Hult., which are no longer recognized. Former taxa are shown below only to indicate appearances of arctic willows found within the refuge.)

Kagati Lake, Kanektok River, Nimgun Lake, Cape Newenham, Cape Peirce, High Lake, Togiak River, Kikertalik Lake, Tuklung Lake, Sunshine Creek

TNWR Mount of Salix arctica:

Kagati Lake, B. Kaplan, 27 Jun 86

UA Mounts of Salix arctica:

Cape Peirce, M. Dick, 7 Jul 73

Cape Peirce, M. Dick, 19 Jun 73

Cape Peirce - opposite Shiak Island, M. Dick, 19 Jun 73

Kagati Lake, P. Caswell, 19 Jun 92

Specimens fitting Hulten's description of Salix arctica Pall. subsp. arctica were found at Kagati Lake, Nimgun Lake, Cape Newenham, Cape Peirce, High Lake and Sunshine Creek.

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Cape Peirce, P. Caswell, 6 Jul 92

Specimens fitting Hulten's description of Salix arctica Pall. subsp. crassijulis (Trautv.) Skvortz. were found at Kagati Lake, Nimgun Lake, Cape Peirce, High Lake, Togiak River (A specimen from Togiak River shows strong subsp. torulosa influence.), Kikertalik Lake, Tuklung Lake and Heart Lake.

TNWR Mount: Tuklung Lake, P. Caswell, 22 Jul 94

Kikertalik Lake, W. Kirk, Sep 90

Cape Peirce, P. Caswell, 4 Jul 92

Specimens fitting Hulten's description of Salix arctica Pall. subsp. torulosa (Trautv.) Hult.

were found at Kagati Lake, Kanektok River, High Lake, Heart Lake and Milk Creek.

Hulten indicates collection in northeastern corner of refuge.

TNWR Mount: Kagati Lake, P. Caswell, 17 Jun 92  
Heart Lake, P. Caswell, 3 Aug 92  
HH Mount: Kagati Lake, P. Caswell, 19 Jun 92

Salix fuscescens Anderss. Brownish Willow, Alaska Bog Willow

Kagati Lake, Quinhagak beach, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak

Recorded by Lipkin at Cape Newenham.  
Hulten indicates collection at Cape Newenham.  
Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Kagati Lake, P. Caswell, 17 Jun 92  
UA Mount: Cape Peirce, L. Dick, 1970

Salix ovalifolia Trautv. Ovalleaf Willow, Round-leaf Willow

Cape Newenham, Cape Peirce, Lake Kikertalik (A specimen collected at Quinhagak beach is possibly Salix ovalifolia X Salix fuscescens, TNWR Spec: Quinhagak beach, P. Caswell, 30 Aug 95.)

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 14 Jul 92  
Lake Kikertalik, W. Kirk, Aug 90 (det. A. Batten)  
UA Mount: Cape Peirce, P. Caswell, 14 Jul 92  
Cape Peirce, M. Dick, 19 Jun 73  
Cape Peirce, M. Dick, 7 Jun 73

Salix stolonifera Cov. Stoloniferous Willow, Ovalleaf Willow, Sprouting Willow

Cape Newenham, Cape Peirce

Collected by Schandelmeier at Cape Peirce.

TNWR Mount: Cape Peirce, P. Caswell, 4 Jul 92  
UA Mount: Cape Peirce, M. H. Dick, 12 Jun 73  
Cape Peirce, L. Dick, 1970

Salix glauca L. Grayleaf Willow, Diamond Willow, Glaucous Willow

Kagati Lake, Kanektok River, Nimgun Creek, Cape Peirce, Togiak River, Banding Lake, Kanakanak, Heart Lake

UA Mount: Cape Peirce, L. Schandelmeier, 18 Aug 73  
Cape Peirce, L. Dick, 1970

Salix glauca L. var. acutifolia (Hook.) Schneid. Grayleaf Willow, Diamond Willow, Glaucous Willow

(Shown in Hulten as Salix glauca L. subsp. acutifolia (Hook.) Hult.)

Kagati Lake, Kanektok River, Nimgun Creek, Cape Peirce, Togiak River, Banding Lake, Kanakanak, Heart Lake

Hulten indicates collection at Cape Newenham.

Dick (Schandelmeier) reports Salix glauca Beringia Phase growing along sides of the stream in the valley south of Slug Mountain.

TNWR Mount: "Big Bend" in Togiak River, P. Caswell,  
5 Aug 92  
Togiak Lake outlet, Rebecca Joyce, 14 Jul 85  
Banding Lake, W. Kirk, Aug 90 (det. A. Batten)  
(subspecies not determined)

UA Mount: "Big Bend" in Togiak River, P. Caswell,  
5 Aug 92 (UA listed subspecies.)

Salix brachycarpa Nutt. subsp. niphoclada (Rydb.) Argus Barren Ground Willow  
(Shown in Hulten as Salix niphoclada Rydb. var. niphoclada and Salix niphoclada Rydb. var. Mexiae (Ball) Hult.)

Kagati Lake (Dr. Lipkin), Cape Newenham, Cape Peirce

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Dillingham, P. Caswell, 16 Jul 95  
UA Specimen: Cape Newenham, P. Caswell, 8 Jul 95  
UA Mount; Dillingham, P. Caswell, 16 Jul 95  
HH Mount: Cape Peirce, P. Caswell, 4 Jul 92

Salix hastata L. Halberd Willow

Kanektok River, Cape Peirce, Kagati Lake

Need a specimen.

Viereck and Little indicate presence in in northern and western portions of refuge.

Salix myrtilifolia Anderss. Low Blueberry Willow

Dillingham - Kanakanak

UA Mount: Dillingham - road to Kankanak Hospital, M. Williams, 28 Jun 65

Salix Barclayi Anderss. Barclay Willow

Kagati Lake, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce, High Lake, Kikertalik Lake, Igushik River, Heart Lake

TNWR Mount: Kagati Lake, P. Caswell, 20 Jun 92

Kagati Lake, P. Caswell, 27 Jun 92

UA Mount: Kagati Lake, P. Caswell, 24 Jun 92

Salix commutata Bebb Undergreen Willow

Igushik River

TNWR Mount: Igushik River, P. Caswell, 27 Jul 94

Salix lanata L. subsp. Richardsonii (Hook.) A. Skvortz. Woolly Willow

Kagati Lake, Cape Newenham, Cape Peirce

TNWR Mount: Kagati Lake, P. Caswell, 22 Jun 92

UA Mount: Kagati Lake, P. Caswell, 22 Jun 92

HH Mount: Kagati Lake, P. Caswell, 22 Jun 92

Salix alaxensis (Anderss.) Cov. Alaska Willow, Feltleaf Willow

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (subspecies not determined), High Lake, Togiak River, Kanakanak, Heart Lake

UA Mount of Salix alaxensis (subspecies not listed):

Cape Peirce, L. Schandelmeier, 26 Aug 73

Salix alaxensis (Anderss.) Coville var. alaxensis Alaska Willow, Feltleaf Willow  
(Shown in Hulten as subsp. alaxensis)

Lake Kagati Lake, Kanektok River (RM21), Cape Newenham (LH & LJ), Kanakanak, Heart

TNWR Mount: Kagati Lake, P. Caswell, 18 Jun 92

Salix alaxensis (Anderss.) Coville var. longistylis (Rydb.) Schneid. Alaska Willow, Feltleaf Willow  
(Shown in Hulten as Salix alaxensis (Anderss.) Cov. subsp. longistylis (Rydb.) Hult.)

Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), High Lake, Togiak River

May 92 TNWR Mount: Road to Snake Lake, north of Dillingham, P. Caswell, 30

May 92 HH Mount: Road to Snake Lake, north of Dillingham, P. Caswell, 30

Salix bebbiana Sarg. Bebb Willow, Diamond Willow, Long-beaked Willow

(Shown in Hulten as Salix depressa L. subsp. rostrata (Anderss.) Hiitonen)

Kanakanak

TNWR Mount: Dillingham - near TNWR Bunkhouse, P. Caswell, 5 Jun 93

UA Specimen: Dillingham - near TNWR Bunkhouse, P. Caswell, 5 Jun 93 (det. C. Parker)

HH Mount: Dillingham - near TNWR Bunkhouse, P. Caswell, 5 Jun 93

Salix planifolia Pursh subsp. pulchra (Cham.) Argus Diamond Leaf Willow  
(Shown in Hulten as Salix pulchra Cham.)

Kagati Lake, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Igushik River, Kanakanak, Heart Lake

Hulten indicates collection at Cape Newenham.

Dick collected Salix planifolia Pursh. subsp. pulchra (Cham.) Argus var. pulchra growing along the banks of the Slug River and on upland tundra in moss near Cape Peirce.

TNWR Mount: Kagati Lake, P. Caswell, 15 Jun 92

Kagati Lake, P. Caswell, 17 Jun 92

Road to Snake Lake, north of Dillingham, P. Caswell, 30 May 92

UA Mount: Cape Peirce, P. Caswell, 4 Jul 92 (UA lists subspecies.)

Kagati Lake, P. Caswell, 14 Jun 92

HH Mount: Kagati Lake, P. Caswell, 17 Jun 92

Salix arbusculoides Anderss. Littletree Willow

Kagati Lake, Nimgun Creek, Cape Newenham (LH & LJ), Togiak Lake

TNWR Mount: Togiak Lake, Rebecca Joyce, 8 Jul 85 (capsules are hairless - possibly because they are mature.)

UA Mount: Togiak Lake - southeast shore, M. Dick, 3 Aug 73

MYRICACEAE (Wax Myrtle Family)

Myrica gale L. var. tomentosa C. DC. Sweet Gale

Four miles west of Cape Constantine, Banding Lake (WK), Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak

TNWR Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92

Banding Lake, W. Kirk, Oct 90 (det. S. Talbot)

UA Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92

BETULACEAE (Birch Family)

Betula nana L. Dwarf Birch

(Shown in Hulten as Betula nana L. subsp. exilis (Sukatsch.) Hult. and Betula glandulosa Michx. Former taxa are shown only to indicate appearance of dwarf birch within the refuge.)

Specimens fitting Hulten's description of Betula nana L. subsp. exilis (Sukatsch.) Hult. were found at:

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake (WK), Tuklung Lake (HJ), Igushik River, Kanakanak, Shannon's Pond, Heart Lake

Hulten indicates collection near Goodnews Bay.  
Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, Lisa Haggblom, 10 Jul 89  
Kikertalik Lake, W. Kirk, Aug 90 (det. D. Murray)  
Tuklung Lake, H. Johnson, 1994  
UA Mount: Cape Peirce, L. S. Dick, 4 Jun 70 (Listed as Betula nana)

Specimens fitting Hulten's description of Betula glandulosa Michx. (Shrub Birch, Ground Birch, Resin Birch, Glandular Birch) were found at:

Kanektok River (RM63), High Lake, Pond between Ongivinuck River and Pungokepek Lake, Banding Lake, Igushik River, Kanakanak, Heart Lake

TNWR Mount: Banding Lake, P. Caswell, 18 Jul 94  
UA Mount: Pond between Ongivinuck River and Pungokepek Lake, P. Caswell, 6 Aug 92

Betula occidentalis Hook. Water Birch, Large Shrub Birch

Kagati Lake, High Lake, Togiak Lake (RJ), Banding Lake, Heart Lake

TNWR Mount: Togiak Lake, Rebecca Joyce, 8 Jul 85  
Banding Lake, P. Caswell, 18 Jul 94

Betula papyrifera Marsh. var. kenaica (W. H. Evans) A. Henry Kenai Birch  
(Shown in Hulten as Betula kenaica Evans)

Forests in the eastern part of the refuge, Nanavochtshak Lake, Togiak Lake, Pond between Ongivinuck River and Pungokepek Lake, Kamnakanak, Shannon's Pond

Specimens appearing to be introgrades between Kenai birch and paper birch were observed at Nanavochtshak Lake, Togiak Lake, and Pond between Ongivinuck River and Pungokepek Lake

Betula neoalaskana Sarg. Paper Birch

(Shown in Hulten as Betula papyrifera Marsh. subsp. humilis (Regel) Hult. and in Viereck and Little as Betula papyrifera var. humilis (Reg.) Fern. & Raup)

Nanavochtshak Lake

TNWR Mount: Nanavochtshak Lake, P. Caswell, 10 Aug 92  
 UA Mount: Nanavochtshak Lake, P. Caswell, 10 Aug 92  
 HH Mount: Nanavochtshak Lake, P. Caswell, 10 Aug 92

Betula neolaskana Sarg. X Betula glandulosa Michx.

Carolyn Parker, UA Museum, believes this may be the identity of some ten feet tall shrubs growing between the Ranger Camp at "Big Bend" on the Togiak River and some ponds to the immediate northwest, however, she labeled the UA mount only as "Betula hybrids".

UA Mount: Togiak River, P. Caswell, 4 Aug 92

Alnus viridis (Vill.) Lam. & DC. subsp. crispa (Ait.) Turrill Mountain Alder, Green Alder  
 (Shown in Hulten as Alnus crispa (Ait.) Pursh subsp. crispa and in Viereck and Little as Alnus crispa (Ait.) Pursh)

Viereck and Little indicate range reaches Dillingham and extends into the northeastern portion of the refuge. Pete Abraham suggests that a shrub growing beside the USF&WS office in Dillingham may be this taxon. He said that the bark's horizontal striations indicate inferiority to the other alder as a fire wood. I examined an old leaf. It did not appear to have lobes. Twigs had abundant lenticels.

TNWR Mount: Dillingham, P. Abraham, 15 Apr 96

Alnus viridis (Vill.) Lam. & DC. subsp. sinuata (Regel) A. & D. Loeve Sitka Alder  
 (Shown in Hulten as Alnus crispa (Ait.) Pursh subsp. sinuata (Regel) Hult. and in Viereck and Little as Alnus sinuata (Reg.) Rydb.)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak Lake (RJ), Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake (WK), Tuklung Lake, Igushik River, Kakanak, Shannon's Pond, Heart Lake

Hulten indicates collection near Kagati Lake.

TNWR Mount: Togiak Lake, Rebecca Joyce, 8 Jul 85  
 Kikertalik Lake, W. Kirk, Sep 88 (det. A. Batten  
 93) (3 mounts)  
 UA Mount: Cape Peirce, P. Caswell, 14 Jul 92  
 Cape Peirce, L. Schandelmeier, 26 Aug 73  
 Cape Peirce, L. S. Dick, 18 Jun 70

URTICACEAE (Nettle Family)

Urtica dioica L. subsp. gracilis (Ait.) Seland. Stinging Nettle  
(Shown in Hulten as Urtica gracilis S. Wats. and Urtica Lyallii S. Wats.)

Lake Amanka, Sunshine Creek

TNWR Mount: Sunshine Creek, P. Caswell, 6 Jun 94  
UA Mount: Lake Amanka - Igushik River outlet, K. Roberson, Jul 65

#### POLYGONACEAE (Buckwheat Family)

Koenigia islandica L. Koenigia

Nimgun Creek, Cape Newenham, Cape Peirce, High Lake

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 8 Jul 92  
UA Mount: Cape Peirce, P. Caswell, 8 Jul 92  
HH Mount: Cape Peirce, P. Caswell, 8 Jul 92  
Cape Peirce, L. S. Dick, 24 Jul 70

Rumex acetosa L. subsp. alpestris (Scop.) Loeve Garden Sorrel, Green Sorrel

Kagati Lake, Kanektok River (RM55)(JC & JP), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Kashaik Mountain, Kikertalik Lake, Tuklung Lake, Igushik River, Heart Lake

Hulten indicates collections near Cape Newenham, Kagati Lake and Togiak village.

TNWR Mount: Kashaik Mountain, P. Caswell, 2 Aug 92  
UA Specimen: Nimgun Lake, P. Caswell, 18 Jun 94 (UA Museum did not list subspecies.)

Rumex arcticus Trautv. Arctic Dock

Kagati Lake (BK), Kanektok River, Nimgun Creek, Cape Newenham, Cape Peirce (LJ), High Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak, Heart Lake

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Kagati Lake, B. Kaplin, 26 Jun 86  
UA Mount: Cape Peirce, L. Schandelmeier, 15 Jul 70

Rumex arcticus Trautv. var. perlatus Hult. Arctic Dock

Nimgun Creek, Banding Lake, Igushik River

TNWR Mount: Banding Lake, P. Caswell, 18 Jul 94

Rumex sibiricus Hult. Beach Dock

Togiak Lake, Togiak Village beach, Kanakanak

TNWR Mount: Togiak Lake, P. Caswell, 8 Aug 92

UA Mount: Togiak Lake, P. Caswell, 8 Aug 92

Oxyria digyna (L.) Hill Mountain Sorrel

Kagati Lake, Kanektok River (RM57) (JC), Nimgun Creek, Cape Newenham, High Lake, Nanavochtshak Lake, Kashaik Mountain, Heart Lake

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92  
Cape Peirce, L. S. Dick, 23 Jul 70

Polygonum viviparum L. Alpine Bistort, Alpine Meadow Bistort  
(UA Museum calls this taxon Bistorta vivipara.)

Kagati Lake, Kanektok River, Nimgun Creek, Goodnews Lake (RJ)(BK), Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak River, Kashaik Mountain, Tuklung Lake, Igushik River, Heart Lake

TNWR Mount: Goodnews Lake, B. Kaplin, 18 Jul 86

Goodnews Lake, Rebecca Joyce, 3 Aug 85

UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92  
Cape Peirce, L. S. Dick, 18 Jul 70

Polygonum bistorta L. subsp. plumosum (Small) Hult. Bistort, Pink Plume, Meadow Bistort  
(UA Museum calls this taxon Bistorta plumosa (Small) E. Greene.)

Kagati Lake (BK), Kanektok River (RM49), Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (LJ), Snake River, Heart Lake

Hulten indicates collection near Kagati Lake.

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Kagati Lake, B. Kaplin, 29 Jun 92

UA Mount: Cape Peirce, P. Caswell, 7 Jul 92  
Snake River area - 25 km southwest of  
Dillingham, D. Mesiar, 17 Jun 79

Polygonum amphibium L. var. stipulaceum Coleman Water Smartweed  
(Shown in Hulten as Polygonum amphibium L. subsp. laevimarginatum Hult.)

Terrestrial and aquatic forms were found at a pond between Ongivinuck River and

## Pungokepuk Lake

TNWR Mount: (Aquatic form) Pond between Ongivinuck River and Pungokepuk Creek, P. Caswell, 6 Aug 92  
 (Terrestrial form) Pond between Ongivinuck River and Pungokepuk Creek, P. Caswell, 6 Aug 92  
 UA Mount: Pond between Ongivinuck River and Pungokepuk Creek, P. Caswell, 6 Aug 92  
 HH Mount: (Terrestrial form) Pond between Ongivinuck River and Pungokepuk Creek, P. Caswell, 6 Aug 92

Polygonum lapathifolium L. var. lapathifolium Willow Weed  
 (Shown in Hulten as Polygonum pennsylvanicum L. subsp. Oneillii (Brenckle) Hult.)

## Togiak River

TNWR Mount: Pond near "Big Bend" in Togiak River, P. Caswell, 13 Aug 92  
 UA Mount: Pond near "Big Bend" in Togiak River, P. Caswell, 5 Aug 92  
 HH Mount: Pond near "Big Bend" in Togiak River, P. Caswell, 5 Aug 92

Polygonum aviculare L. Knotweed

## Kanektok River, Cape Peirce

TNWR Mount: Kanektok River, P. Caswell, 28 Jul 92  
 UA Mount: Kanektok River, P. Caswell, 28 Jul 92  
 Cape Peirce, L. Shandelmeier, 26 Aug 73

## PORTULACACEAE (Purslane Family)

Claytonia eschscholtzii Cham. Bering Sea Spring Beauty  
 (Shown in Hulten as Claytonia acutifolia Pall. subsp. graminifolia Hult.)

## Cape Newenham (LH &amp; LJ)

TNWR Mount: Cape Newenham, P. Caswell, 19 Jun 95  
 UA Mount: Cape Newenham, L. Jemison and L. Haggblom, 23 Jun 93  
 HH Mount: Cape Newenham, L. Jemison and L. Haggblom, 23 Jun 93

Claytonia tuberosa Pallas ex J. A. Schultes Tuberous Spring Beauty

## Cape Newenham (LH &amp; LJ)

TNWR Mount: Cape Newenham, P. Caswell, 19 Jun 95  
 UA Mount: Cape Newenham, P. Caswell, 19 Jun 95  
 HH Mount: Cape Newenham, L. Haggblom and L. Jemison, 23 Jun 93

Claytonia scammaniana Hult. Scamman=s Spring Beauty

Cape Newenham

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Cape Newenham, P. Caswell, 20 Jun 95

UA Mount: Cape Newenham, P. Caswell, 5 Jul 95

HH Mount: Cape Newenham, P. Caswell, 26 Jun 95

Claytonia sarmentosa C. A. Mey. Alaska Spring Beauty

Kagati Lake, Kanektok River (RD & AW), Nimgun Lake, Nimgun Creek, Mountain lake south of Ungluayagat at Goodnews Lake (RJ), Cape Newenham (LH and LJ), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Kashaik Mountain, Heart Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Mountain Lake south of Ungluayagat,  
Goodnews Lake, Rebecca Joyce, 4 Aug 85

UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

Cape Peirce, L. S. Dick, 13 Jun 70

Montia chamissoi (Ledeb. ex Spreng.) Greene Toad Lily  
(Shown in Hulten as Claytonia Chamissoi Esch.)

Kanektok River, Cape Newenham, Cape Peirce, Togiak River, Rainbow Creek (JC &amp; SH)

TNWR Mount: Kanektok River, Rob Doyle, 30 Jul 92

Cape Peirce, P. Caswell, 10 Aug 95

Cape Newenham, P. Caswell, 8 Jul 95 (deep water form)

UA Mount: Kanektok River, P. Caswell, 27 Jul 92

Cape Peirce, P. Caswell, 8 Jul 92

Cape Newenham, P. Caswell, 23 Jun 95 (deep water form)

Montia fontana L. subsp. fontana Water Blinks, Blinks, Water Chickweed

Kanektok River (RM57), Quinhagak beach, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, Igushik River

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 8 Jul 92

Nushagak Peninsula - Igushik River, P. Caswell,

27 Jul 94

UA Mount: Cape Peirce, P. Caswell, 18 Jul 92

Cape Peirce, L. S. Dick, 24 Jul 70

HH Mount: Cape Peirce, P. Caswell, 8 Jul 92

## CARYOPHYLLACEAE (Pink Family)

Stellaria media (L.) Vill. Common Chickweed

Kanektok River, Quinhagak dump, Kanakanak

TNWR Mount: Quinhagak dump, P. Caswell, 27 Jul 92  
 UA Mount: Quinhagak dump, P. Caswell, 27 Jul 92  
 Kanektok River, P. Caswell, 26 Jul 92

Stellaria crispa Cham. & Schlecht.

Cape Newenham

Recorded by Lipkin at Cape Newenham.

Stellaria humifusa Rottb. Low Chickweed

Nanvak Bay, stream east of Puffin Creek

TNWR Mount: Cape Peirce (Nanvak Bay), P. Caswell, 10 Aug 95  
 UA Mount: Cape Peirce, L. Schandelmeier, 10 Jul 70

Dick (Schandelmeier) reports collecting the specimen along a stream in the valley two miles southeast of Slug Mountain.

Stellaria crassifolia Ehrh. Fleshy Starwort

Kanektok River, Quinhagak - beach on Bering Sea, Arolik River (A. Archibeque & R. MacD.), Nimgun Creek, Cape Peirce, Togiak Lake, Togiak River, Four miles west of Cape Constantine, Lake Kikertalik, Igushik River, Heart Lake

Dick reported Stellaria crassifolia at Cape Peirce.

TNWR Mount: Quinhagak - beach on Bering Sea, P. Caswell, 28 Jun 92  
 Kanektok River - lower part, P. Caswell, 27 Jul 92 (var. linearis)  
 UA Mount: Kanektok River, P. Caswell, 26 Jul 92

Stellaria calycantha (Ledeb.) Bong. Northern Starwort  
 (Shown in Hulten as Stellaria calycantha (Ledeb.) Bong. subsp. calycantha)

Nimgun Creek, Cape Newenham, High Lake, Heart Lake

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Cape Newenham, P. Caswell, 9 Jul 95  
 UA Specimen: Cape Newenham, P. Caswell, 29 Jun 95

Stellaria borealis Bigelow subsp. borealis Northern Starwort

(Shown in Hulten as Stellaria calycantha (Ledeb.) Bong. var. isophylla (Fern.) Fern. and Stellaria calycantha (Ledeb.) Bong. subsp. interior Hult.)

Kanektok River, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak River, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Heart Lake

TNWR Mount: Kanektok River - near Wilderness Area boundary, P. Caswell, 28 Jul 92 (2 mounts showing diversity)  
 UA Mount: Togiak River - on "Big Bend", P. Caswell 5 Aug 92 (UA listed subspecies.)  
 UA Specimens: Igushik River, P. Caswell, 27 Jul 94  
 Kikertalik Lake, P. Caswell, 19 Jul 94

Stellaria longifolia Muhl. Long-leaved Starwort

Kanektok River

UA Mount: Kanektok River, P. Caswell, 25 Jul 92  
 HH Mount: Kanektok River, P. Caswell, 25 Jul 92

Stellaria longipes Goldie subsp. longipes Long Stalked Starwort

(Shown in Hulten as Stellaria monantha Hult., Stellaria longipes Goldie, Stellaria laeta Richards. and Stellaria Edwardsii R. Br. This taxon includes the former Stellaria subvestita Greene. To avoid confusion, the taxa shown in Hulten appear below.)

Specimens fitting Hulten=s description of Stellaria monantha Hult. Long Stalked Starwort

Kagati Lake, Kanektok River, Nimgun Lake, High Lake, Togiak River, Heart Lake

TNWR Mount: Togiak River, Rebecca Joyce, 18 Jul 85 (Determination is suspect as most sepals glabrous, but several are ciliate on back. Would be safer to call it S. longipes Goldie s.l.)  
 UA Mount: Kagati Lake, P. Caswell, 18 Jun 92

Specimens fitting Hulten=s description of Stellaria longipes Goldie Long Stalked Starwort

Cape Peirce, Banding Lake, Igushik River

TNWR Mount: Cape Peirce, P. Caswell, Aug 95  
 HH Mount: Banding Lake, P. Caswell, 18 Jul 94  
 UA Specimen: Igushik River, P. Caswell, 26 Jul 94

Specimens fitting Hulten=s description of Stellaria laeta Richards. Long Stalked Starwort

Kagati Lake, Kanektok River, Cape Peirce, Pungokebuk Lake (JM & R. MacD.), Igushik River, Heart Lake

TNWR Mount: Kagati Lake, P. Caswell, 25 Jun 92

UA Specimen: Kanektok River, P. Caswell, 19 Aug 94

Specimens fitting Hulten=s description of Stellaria Edwardsii R. Br. Edward's Stellaria

Kagati Lake, Cape Newenham, Cape Peirce

TNWR Mount: Cape Peirce, P. Caswell, 13 Jul 92

UA Mount: Cape Peirce, P. Caswell, 13 Jul 92

Cape Peirce, L. Schandelmeier, 10 Jul 70

HH Mount: Kagati Lake, P. Caswell, 25 Jun 92

Stellaria dicranoides (Cham. & Schlecht.) Fenzl

(Shown in Hulten as Arenaria Chamissonis Maguire)

Cape Newenham

Lipkin records Arenaria chamissonis at Cape Newenham.

Cerastium maximum L. Great Chickweed

Heart Lake

UA Mount: Heart Lake, P. Caswell, 15 Aug 94

HH Mount: Heart Lake, P. Caswell, 15 Aug 94

Cerastium beeringianum Cham & Schlecht. subsp. beeringianum Mouse-ear Chickweed, Beering Chickweed

(Shown in Hulten as Cerastium Beeringianum Cham. & Schlecht.)

UA Mounts (no subspecies or variety listed):

Heart Lake, P. Caswell, 10 Aug 94

Cape Peirce, L. S. Dick, 13 Jun 70

Cape Peirce, L. S. Dick, 11 Aug 70

Cape Peirce, L. Schandelmeier, 18 Aug 70

Togiak Lake, M. Dick, 3 Aug 73

Variation grandiflorum is prevalent. Variation Beeringianum is scarce and seems restricted to higher altitudes or areas of severe climate.

Cerastium beeringianum Cham. & Schlecht. subsp. beeringianum var. beeringianum Mouse-ear Chickweed, Beering Chickweed

(Shown in Hulten as Cerastium Beeringianum Cham. & Schlecht. var. Beeringianum)

Cape Newenham, Heart Lake

HH Mount: Heart Lake, P. Caswell, 5 Aug 94

Cerastium beeringianum Cham. & Schlecht. subsp. beeringianum var. grandiflorum (Fenzl) Hulten Mouse-ear Chickweed, Beering Chickweed, Large Flowered Chickweed

(Shown in Hulten as Cerastium Beeringianum Cham. & Schlecht. var. grandiflorum)

(Fenzl) Hult.)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Goodnews Lake (BK), Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak Lake (RB), Pungokebuk Lake (JM & R. MacD.), Togiak River, Heart Lake

Recorded by R. Lipkin at Kagati Lake

TNWR Mount: Kagati Lake, P. Caswell, 28 Jun 92  
 Goodnews Lake, B. Kaplin, 31 Jul 86  
 Togiak Lake, Rebecca Joyce, 4 Jul 85  
 Heart Lake, P. Caswell, 12 Aug 94  
 UA Mount: Cape Peirce, P. Caswell, 9 Jul 92

Cerastium aleuticum Hult. TENTATIVE

Cape Newenham

Recorded by Lipkin as a tentative determination at Cape Newenham.

Cerastium Regelii Ostenf.

Hulten states one sterile specimen was collected at Cape Newenham.

Sagina nivalis (Lindbl.) Fries Snow Pearlwort  
 (Shown in Hulten as Sagina intermedia Fenzl)

Kanektok River, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Heart Lake

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92  
 UA Mount: Kanektok River, P. Caswell, 28 Jul 92  
 Cape Peirce - Nanvak Bay, L. Schandelmeier, 22 Aug 73

Sagina saginoides (L.) Karst. Arctic Pearlwort

Kanektok River, Cape Newenham, Cape Peirce, Heart Lake

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92  
 UA Mount: Kanektok River, P. Caswell, 28 Jul 92  
 HH Mount: Kanektok River, P. Caswell, 26 Jul 92

Minuartia macrocarpa (Pursh) Ostenf. Long-podded Sandwort

Kagati Lake, Kanektok River (RM55) (JC & JP), Nimgun Lake, Pyramid Mountain, Cape Newenham (LH & LJ), Cape Peirce, High Lake, Heart Lake

Recorded by Lipkin at Cape Newenham.

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 8 Jul 92  
 UA Mount: Kagati Lake, P. Caswell, 24 Jun 92  
 Cape Peirce, L. S. Dick, 27 Jun 70

Minuartia arctica (Stev.) Aschers. & Graebn. Arctic Sandwort

Kagati Lake, Kanektok River (RM50, RD & AW), Nimgun Lake, Nimgun Creek, Pyramid Mountain, Cape Newenham, Cape Peirce (LJ), High Lake, A double petalled form was found between Ongivinuck River and Pungokebuk Lake, Heart Lake

Recorded by Lipkin at Kagati Lake and Cape Newenham.  
 Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 4 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 4 Jul 92  
 Cape Peirce, L. S. Dick, 11 Jun 70

Transitional forms between M. arctica and M. obtusiloba were found at Heart Lake:

HH Mount: Heart Lake, P. Caswell, 12 Aug 94

Minuartia obtusiloba (Rydb.) House Alpine Sandwort, Little Arctic Sandwort

Kanektok River (RM57), Nimgun Creek, Cape Newenham, Cape Peirce, Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 12 Aug 94  
 UA Mount: Nimgun Lake, P. Caswell, 16 Jun 94  
 Cape Peirce, L. S. Dick, 23 Jun 70

Minuartia stricta (Sw.) Hiern Rock Sandwort, Fragile Sandwort

Kanektok River (RM46 & 57), High Lake, Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 5 Aug 94  
 UA Mount: Heart Lake, P. Caswell, 10 Aug 94

Minuartia rubella (Wahlenb.) Graebn. Reddish Sandwort

Kagati Lake (Dr. Lipkin), Kanektok River (RD & AW), Nimgun Lake, High Lake, Heart Lake, Milk Creek

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Kanektok River, R. Doyle and A. Wheeler, 28 Jun 94  
 Heart Lake, P. Caswell, 7 Aug 94  
 UA Mount: Kanektok River, R. Doyle and A. Wheeler, 28 Jun 94  
 Heart Lake, P. Caswell, 7 Aug 94

Minuartia elegans (Cham. & Schlecht.) Schischkin  
(Shown in Hulten as Minuartia Rossii var. elegans (Cham. & Schlecht.) Hulten.)

Cape Newenham

Recorded by Lipkin at Cape Newenham.

Minuartia rossii (R. Br.) Graebn. Ross Sandwort

Cape Peirce

TNWR Mount: Cape Peirce, P. Caswell, 13 Jul 92

UA Mount: Cape Peirce, P. Caswell, 13 Jul 92

HH Mount: Cape Peirce, P. Caswell, 13 Jul 92

Honckenya peploides (L.) Ehrh. Seabeach Sandwort, Beach Sandwort

Quinhagak beach, Cape Newenham, Cape Peirce, Four miles west of Cape Constantine

UA Mounts of Honckenya peploides (subspecies not listed):

Cape Peirce, P. Caswell, 3 Jul 92

Cape Peirce, P. Caswell, 18 Jul 92

Cape Peirce, L. S. Dick, 22 Jun 70

Honckenya peploides (L.) Ehrh. subsp. peploides Seabeach Sandwort, Beach Sandwort

Cape Peirce, Four miles west of Cape Constantine

TNWR Mount: Cape Peirce, Lisa Haggblom, 25 Jun 89

Cape Peirce, P. Caswell, 3 Jul 92

HH Mount: Cape Peirce, P. Caswell, 3 Jul 92

Honckenya peploides (L.) Ehrh. subsp. major (Hook.) Hult. Seabeach Sandwort, Beach Sandwort

Quinhagak beach, Cape Newenham, Cape Peirce, Four miles west of Cape Constantine

Hulten indicates collections at Cape Newenham and near Goodnews.

TNWR Mount: Quinhagak beach, P. Caswell, 28 Jul 92

HH Mount: Quinhagak beach, P. Caswell, 28 Jul 92

Moehringia lateriflora (L.) Fenzl Grove Sandwort

Kagati Lake, Nimgun Lake, Nimgun Creek, Cape Newenham (LJ 92), Cape Peirce, High Lake, Togiak Lake (RJ)(BK), Four miles west of Cape Constantine, Kikertalik Lake, Tuklung Lake, Igushik River, Heart Lake

Hulten indicates collection near Nanvak Bay.

TNWR Mount: Togiak Lake, B. Kaplin, 4 Jul 86

UA Mount: Togiak Lake, Rebecca Joyce, 14 Jul 85  
Kagati Lake, P. Caswell, 29 Jun 92

Wilhelmsia physodes (Fisch.) McNeill Merckia

Kanektok River RM48) (JC & JP), Arolik River (A. Archibeque & R. MacD.), Nimgun Creek, Goodnews River, Cape Newenham, Cape Peirce, High Lake, Togiak River, Heart Lake

TNWR Mount: "Big Bend" in Togiak River, P. Caswell, 5 Aug 92  
UA Mount: "Big Bend" in Togiak River, P. Caswell, 7 Aug 92  
Cape Peirce, L. S. Dick, 28 Jul 70

Silene acaulis (L.) Jacq. Moss Champion, Cushion Pink

Kagati Lake, Kanektok River (RM 50, RD & AW), Nimgun Lake, Goodnews Lake, Cape Newenham (LH & LJ), Cape Peirce, High Lake, Togiak River, Heart Lake

UA Mount: Cape Peirce, L. S. Dick, 22 Jun 70

Silene acaulis (L.) Jacq. var. acaulis Moss Champion, Cushion Pink  
(Shown in Hulten as Silene acaulis L. subsp. acaulis)

Kanektok River (RM55, JC & JP), Cape Newenham (LH & LJ), Cape Peirce (RB)

TNWR Mount: Cape Peirce, Rachel Budelsky, 17 Jun 86

Silene acaulis (L.) Jacq. var. subacaulescens (F. N. Williams) Fern. & St. John Moss Champion, Cushion Pink

(Shown in Hulten as Silene acaulis L. subsp. subacaulescens (F. N. Williams) Hult.)

Kagati Lake, Kanektok River (RM50, RD & AW), Nimgun Lake, Goodnews Lake (KN & SH), Cape Peirce (RB), High Lake, Togiak River, Heart Lake

Note: Some specimens collected at Cape Peirce had strongly ciliate linear leaves.

Silene uralensis (Rupr.) Bocquet subsp. uralensis Nodding Melandrium  
(Shown in Hulten as Melandrium apetalum (L.) Fenzl subsp. arcticum (E. Fries) Hult.)  
(UA Museum calls this taxon Gastrolychnis apetala (L.) Tolm. & Kozh.)

Kanektok River (RM55, JC & JP), (RM57), Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Nanvak Bay, High Lake, Heart Lake

Lipkin records Gastrolychnis apetala at Cape Newenham.

TNWR Mount: Cape Peirce - west side of Nanvak Bay, P. Caswell, 11 Jul 92  
UA Mount: Cape Peirce - west side of Nanvak Bay,  
P. Caswell, 11 Jul 92 (UA did not list a subspecies.)  
HH Mount: Cape Peirce - west side of Nanvak Bay, P. Caswell, 11 Jul 92

Silene macrosperma (Porsild) Hulten Erect Melandrium  
(Shown in Hulten as Melandrium macrospermum Pors.)

Heart Lake

HH Mount: Heart Lake, P. Caswell, 4 Aug 94

Silene tayloriae (B. L. Robins.) Hulten Taylor's Melandrium  
(Shown in Hulten as Melandrium Taylorae (Robins.) Tolm.)

Kanektok River

UA Specimen: PPC-359-95 Kanektok River (RM46) P. Caswell, 26 Aug 95

NYMPHAEEAE (Water Lily Family)

Nuphar lutea (L.) Sm. subsp. polysepala (Engelm.) E. O. Beal Yellow Pond Lily, Yellow Water Lily, Spatterdock

(Shown in Hulten as Nuphar polysepalum Engelm.)

Togiak River, Banding Lake, Kikertalik Lake, Tuklung Lake, throughout the Nushagak Peninsula and in ponds west of Dillingham

RANUNCULACEAE (Crowfoot Family)

Caltha palustris L. Marsh Marigold, Yellow Marsh Marigold

Kagati Lake, Kanektok River, Arolik River (A. Archibeque & R. MacD.), Nimgun Lake, Nimgun Creek, Mountain lake south of Ungluaykagat at Goodnews Lake (RJ), Cape Newenham, Cape Peirce, Togiak Lake (RJ), Togiak River, Snake River (subspecies not known), Kanakanak, Heart Lake, Milk Creek

UA Mounts of Caltha palustris (subspecies not listed):

Cape Peirce, L. Schandelmeier, 1970

Cape Peirce, L. S. Dick, 22 Jun 70

Snake River - 24 km southwest of Dillingham, D. Mesiar,  
16 Jun 79

Caltha palustris L. var. radicans (J. R. Frost) Beck Marsh Marigold, Yellow Marsh Marigold  
(Shown in Hulten as Caltha palustris L. subsp. arctica (R. Br.) Hult.)

Kagati Lake, Kanektok River, Arolik River (A. Archibeque & R. MacD.), Nimgun Lake, Nimgun Creek, Cape Newenham, Mountain lake south of Ungluaykagat at Goodnews Lake (RJ), Cape Peirce, Togiak Lake (RJ), Togiak River, Kanakanak, Milk Creek

Collected by Dick (Schandelmeier) in standing water near a small stream on the long

beach north of Shaiak Island (Cape Peirce).

TNWR Mount: Togiak River, Rebecca Joyce, 18 Jul 85  
Mountain lake south of Ungluayagat, Goodnews Lake, Rebecca Joyce, 9 Aug 85

UA Mount: Cape Peirce, P. Caswell, 4 Jul 92 (UA listed subspecies.)

Caltha palustris L. var. palustris Marsh Marigold, Yellow Marsh Marigold  
(Shown in Hulten as Caltha palustris L. subsp. asarifolia (DC.) Hult.)

Kagati Lake (BK), Kanektok River (RM49), Nimgun Creek, Cape Newenham, Heart Lake

TNWR Mount: Kagati Lake, B. Kaplin, 8 Jul 86

Actaea rubra (Ait.) Willd. Red Baneberry

Togiak Lake, Pond between Ongivinuck River and Pungokepuk Lake

UA Mount of Actaea rubra (subspecies not listed):

Pond between Ongivinuck River and Pungokepuk Lake,  
P. Caswell, 5 Aug 92

Actaea rubra (Ait.) Willd. subsp. rubra Red Baneberry

Pond between Ongivinuck River and Pungokepuk Lake

TNWR Mount: Pond between Ongivinuck River and Pungokepuk Lake, P. Caswell, 5 Aug 92

Actaea rubra (Ait.) Willd. subsp. arguta (Nutt.) Hult. Red Baneberry

Togiak Lake (BK)

TNWR Mount: Togiak Lake, B. Kaplin, 6 Jul 86

Aconitum delphinifolium DC. subsp. delphinifolium Monkshood

(Kartesz does not recognize variety albiflorum Pors. It is included in this taxon. It is shown below only to indicate where white monkshood occurs.)

Kagati Lake, Kanektok River, Nimgun Creek, Goodnews Lake (RJ), Cape Newenham (LH & LJ), Cape Peirce, Slug Mountain, High Lake, Nanavochtshak Lake, West Togiak Creek, Kemuk Creek (A. Archibeque photo), Kashaik Mountain, Kikertalik Lake, Tuklung Lake, Igushik River, Snake River, Heart Lake

Hulten indicates collection near Kagati Lake.

TNWR Mount: Goodnews Lake, B. Kaplin, 18 Jul 86  
Goodnews Lake, Rebecca Joyce, 3 Aug 85

UA Mounts of Aconitum delphinifolium (subspecies not listed):

Kanektok River, P. Caswell, 25 Jul 92  
 Kikertalik Lake, P. Caswell, 20 Aug 92  
 (C. Parker said the Kikertalik Lake specimen was not subsp. Chamissonianum.)  
 Kagati Lake vicinity, S. Martin, 19 Jul 84  
 West Togiak Creek, M. Coffing, 17 Jul 79  
 Snake River area - 24 km southwest of  
 Dillingham, D. Mesiar, 26 Jul 79  
 Cape Peirce, L. S. Dick, 30 Jul 70

Specimens fitting Hulten's description of Aconitum delphinifolium DC. subsp. delphinifolium var. albiflorum Pors. (White Monkshood) were found at High Lake, Kemuk Creek (A. Archibewque photo) and Heart Lake.

Specimens with very pale blue blossoms were collected at Nanavochtshak Lake. Similar very pale blue blossoms were found in association with the white blossoms of var. albiflorum at High Lake and Heart Lake and at Lake Kulik in Wood Tikchik State Park. Although white blossoms were not found at Nanavochtshak Lake, the pale blue blossoms suggest potential presence of var. albiflorum.)

TNWR Mount: Heart Lake, P. Caswell, 4 Aug 94 (white)  
 Heart Lake, P. Caswell, 4 Aug 94 (very pale blue)

Aconitum delphinifolium DC. subsp. paradoxum (Rchb.) Hult. Monkshood

Cape Newenham, Cape Peirce (RJ)(LJ)

Recorded by Lipkin at Cape Newenham.

Reported by Dick (Schandelmeier) at Cape Peirce.

I do not remember seeing any monkshood other than subspecies paradoxum at Cape Peirce.

TNWR Mount: Cape Peirce, Rebecca Joyce, 18 Aug 85  
 UA Mount: Cape Peirce, P. Caswell, 3 Jul 92  
 HH Mount: Cape Peirce, P. Caswell, 12 Jul 92

Anemone richardsonii Hook. Richardson's Anemone, Yellow Anemone

Kagati Lake, Kanektok River (RD & AW), KArulik River (A. Archibeque & R. MacD.),  
 Nimgun Lake, Nimgun Creek, Mountain Lake south of Ungluayagat at Goodnews Lake  
 (RJ), Cape Newenham, Cape Peirce (RJ)(LH)(LJ), High Lake, Nanavochtshak Lake,  
 Togiak Lake, Togiak River (RJ), Sunshine Creek, Heart Lake

TNWR Mount: Cape Peirce, L. Jemison, 17 Jun 89  
 Cape Peirce, Rebecca Joyce, 20 Jun 85  
 Togiak River, Rebecca Joyce, 9 Jul 85  
 UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92  
 Cape Peirce, L. S. Dick, 7 Jun 70

Anemone parviflora Michx. Northern Anemone, Windflower

Kagati Lake, Kanektok River (RM55, JC & JP), Nimgun Lake, Nimgun Creek, Cape Peirce, High Lake, Heart Lake

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Kagati Lake, P. Caswell, 15 Jun 92  
 UA Mount: Cape Peirce, P. Caswell, 4 Jul 92  
 Cape Peirce, L. S. Dick, 4 Jun 70

Anemone narcissiflora L. Wild Narcissus, Narcissus-flowered Anemone

Kagati Lake, Kanektok River, Nimgun Lake, Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Pond between Ongivinuck River and Pungokepuk Lake, Snake River, Killian Ridge, Ridge west of Sunshine Creek, Heart Lake

UA Mounts of Anemone narcissiflora (subspecies not listed):

Cape Peirce, L. Schandelmeier, 9 Jun  
 Snake River - 24 km southwest of Dillingham, D.  
 Mesiar, 17 Jun 79  
 Cape Peirce, P. Caswell, 3 Jul 92  
 Kagati Lake, P. Caswell, 24 Jun 92

Anemone narcissiflora L. subsp. sibirica (L.) Hult. Wild Narcissus, Narcissus-flowered Anemone

Kagati Lake, Kanektok River (RM46, JC & JP), Nimgun Lake, Cape Newenham, Cape Peirce, High Lake, Killian Ridge, Ridge west of Sunshine Creek, Heart Lake

TNWR Mount: Kagati Lake, P. Caswell, 17 Jun 92

Anemone narcissiflora L. subsp. interior Hult. Wild Narcissus, Narcissus-flowered Anemone

Kagati Lake, Kanektok River (RM55, JC & JP), Cape Peirce, Nanavochtshak Lake

TNWR Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92  
 UA Specimen: Cape Peirce, P. Caswell, 4 Jul 92

Anemone narcissiflora L. subsp. villosissima (DC.) Hult. Wild Narcissus, Narcissus-flowered Anemone

Mountain northeast of Kagati Lake, Cape Peirce

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, A. Aderman, 3 Jun 95  
 HH Mount: Mountains northeast of Kagati Lake, P. Caswell, 24 Jun 92

Anemone narcissiflora L. subsp. alaskana Hult. Wild Narcissus, Narcissus-flowered Anemone

Kagati Lake, Nimgun Lake, Cape Newenham, High Lake, Pond between Ongivinuck River and Pungokepuk Lake, Heart Lake

TNWR Mount: Cape Peirce, Lisa Haggblom, 6 Jun 89  
Kagati Lake, P. Caswell, 14 Jun 92

Anemone drummondii S. Wats. Alpine Anemone, Drummond Anemone

Kagati Lake, Kanektok River (RM63), Heart Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Kagati Lake, P. Caswell, 15 Jun 92  
UA Mount: Kagati Lake, P. Caswell, 15 Jun 92

Ranunculus trichophyllus Chaix. var. trichophyllus White Water Crowfoot, White Water Buttercup

Kanektok River, Nimgun Lake, Goodnews River (KN & SH), Cape Peirce, High Lake, Nanavochtshak Lake, Pungokepouk Lake (JM & R. MacD.), Togiak River, Amanka Lake

TNWR Mount: Kanektok River, P. Caswell, 27 Jul 92  
UA Mount: Kanektok River, P. Caswell, 26 Jul 92  
Cape Peirce, L. Schandelmeier, 26 Aug 73  
Amanka Lake, M. S. Dickson, 14 Jul 77

Ranunculus trichophyllus Chaix. var. eradicatus (Laestad.) W. Drew Fragile White Water Crowfoot

(Shown in Hulten as Ranunculus confervoides (E. Fries) E. Fries)

Four miles west of Cape Constantine

TNWR Mount: Four miles west of Cape Constantine, P. Caswell, 29 Jul 94  
UA Mount: Four miles west of Cape Constantine, P. Caswell, 29 Jul 94 (C. Parker determined specimen to be Ranunculus trichophyllus. She did not list subspecies.)  
HH Mount: Four miles west of Cape Constantine, P. Caswell, 29 Jul 94

Ranunculus gmelinii DC. var. gmelinii Yellow Water Crowfoot, Gmelin's Buttercup, Small Yellow Water Buttercup

(Shown in Hulten as Ranunculus Gmelini DC. subsp. Gmelini)

Kanektok River, High Lake, Togiak Lake, Togiak River, Four miles west of Cape Constantine

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92  
UA Mount: Kanektok River, P. Caswell, 26 Jul 92

Ranunculus hyperboreus Rottb. var. hyperboreus Arctic Buttercup, Creeping Buttercup  
(Shown in Hulten as subsp. hyperboreus)

Kagati Lake (R. Lipkin), Kanektok River, Quinhagak beach, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Togiak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kanakanak, Milk Creek

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Quinhagak beach, P. Caswell, 28 Jul 92

UA Mount: Cape Peirce, P. Caswell, 8 Jul 92

Ranunculus pallasii Schlecht. Pallas Buttercup

Kanektok River, Quinhagak beach, Cape Peirce, Four miles west of Cape Constantine

Collected by Dick (Schandelmeier) in a small pond near the west shore of Nanvak Bay.

TNWR Mount: Tundra pond between Cape Peirce and Slug Mountain, P. Caswell, 15 Jul 92

UA Mount: Tundra pond between Cape Peirce and Slug Mountain, P. Caswell, 15 Jul 92  
Cape Peirce, L. S. Dick, 18 Jul 70  
Quinhagak, C. Heller, 7 Sep 51

HH Mount: Tundra pond between Cape Peirce and Slug Mountain, P. Caswell, 15 Jul 92

Ranunculus lapponicus L. Lapland Buttercup

Mountain lake south of Ungluayagat (Goodnews Lake), Cape Newenham, Cape Peirce

Hulten indicates collection at Cape Newenham.

TNWR Mount: Mountain lake south of Ungluayagat, Goodnews Lake, Rebecca Joyce, 4 Aug 85

UA Mount: Cape Peirce, P. Caswell, 15 Jul 92

HH Mount: Cape Peirce, P. Caswell, 10 Jul 92

Ranunculus flammula L. var. filiformis (Michx.) Hook. Creeping Spearwort  
(Shown in Hulten as Ranunculus reptans L.)

Kanektok River, Cape Peirce (RJ), High Lake, Nanavochtshak Lake, Togiak Lake, Togiak River

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, Rebecca Joyce, 18 Aug 85

UA Mount: Kanektok River, P. Caswell, 29 Jul 92

Cape Peirce, L. S. Dick, 26 Jul 70

Ranunculus eschscholtzii Schlecht. Mountain Buttercup, Eschscholtz Buttercup, Sub-alpine Buttercup

Kagati Lake, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce, Slug Mountain, High Lake, Kaskaik Mountain, Heart Lake

TNWR Mount: Slug Mountain, P. Caswell, 15 Jul 92  
 UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

Ranunculus nivalis L. Snow Buttercup

Kagati Lake, Kanektok River (RM55, JC & JP), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Heart Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Kagati Lake, P. Caswell, 24 Jun 92  
 UA Mount: Kagati Lake, P. Caswell, 24 Jun 92  
 Cape Peirce, L. S. Dick, 24 Jun 70

Ranunculus sulphureus Soland. ex Phipps Sulphur Buttercup  
 (Shown in Hulten as Ranunculus sulphureus Soland. var. sulphureus)

Nimgun Lake, Cape Newenham, High Lake

TNWR Mount: Nimgun Lake, P. Caswell, 24 Jun 94  
 UA Mount: Nimgun Lake, P. Caswell, 20 Jun 94

Ranunculus karelinii Czern. Arctic Buttercup  
 (Shown in Hulten as Ranunculus gelidus Karel. & Kiril. subsp. Grayi (Britt.) Hult.)

Kanektok River (RM57), Nimgun Creek, Cape Newenham, High Lake

TNWR Mount: Nimgun Creek, P. Caswell, 7 Jul 94

Ranunculus pygmaeus Wahlenb. var. pygmaeus Dwarf Buttercup, Pygmy Buttercup  
 (Shown in Hulten as subsp. pygmaeus)

Kanektok River (RM57), Nimgun Lake, Nimgun Creek, Cape Newenham, High Lake, Kashaik Mountain, Heart Lake

Hulten indicates collection near Quinhagak.

TNWR Mount: Heart Lake, P. Caswell, 7 Aug 94  
 UA Mount: Nimgun Lake, P. Caswell, 26 Jun 94  
 (UA did not list subspecies.)

Ranunculus repens L. Creeping Buttercup

Togiak River

TNWR Mount: "Big Bend" in Togiak River, P. Caswell, 4 Aug 92

UA Mount: "Big Bend" in Togiak River, P. Caswell, 5 Aug 92

Thalictrum alpinum L. Arctic Meadowrue

Kagati Lake, Nimgun Lake, Cape Newenham, High Lake

TNWR Mount: Nimgun Lake, P. Caswell, 26 Jun 94

UA Mount: Kagati Lake, P. Caswell, 28 Jun 92

Cape Newenham, P. Caswell, 18 Jun 95

HH Mount: Kagati Lake, P. Caswell, 28 Jun 92

Thalictrum sparsiflorum Turcz. Meadow Rue, Few-flowered Meadow Rue

Kagati Lake, Kanektok River, Nimgun Creek, High Lake, Togiak Lake (RJ)(BK), Togiak River, Snake River, Heart Lake

TNWR Mount: Kanektok River, P. Caswell, 27 Jul 92

Togiak Lake, Rebecca Joyce, 4 Jul 85

Togiak Lake, B. Kaplin, 4 Jul 86

UA Mount: Kanektok River, P. Caswell, 27 Jul 92

Snake River - 24 km southwest of Dillingham, D. Mesiar,

16 Jun 79

Thalictrum hultenii Boivin

(Shown in Hulten as Thalictrum minus L. subsp. kemense (E. Fries) Hult.)

Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 7 Aug 94

UA Mount: Heart Lake, P. Caswell, 7 Aug 94

(UA listed subspecies.)

PAPAVERACEAE (Poppy Family)

Papaver walpolei Pors. Walpole's Poppy

Kanektok River (RM46, JC & JP)

TNWR Mount: Kanektok River (RM46) on red pumice slope, J. Culbertson and J. Peirce, 29 Jul 95

UA Specimen: Kanektok River (RM46) on red pumice slope, J. Culbertson and J. Peirce, 29 Jul 95 (Verified by C. Parker.)

HH Mount: Kanektok River (RM46) on red pumice slope, P. Caswell, 26 Aug 95

Papaver macounii Greene

Cape Newenham (R. Lipkin)

Recorded by Lipkin at Cape Newenham.

Papaver radicum Rottb. s. lat. cf. Papaver pulvinatum

Cape Newenham (LH & LJ)

Specimen was identified by Dr. D. Murray. The poppy is Asian, but appears to have a solid foothold at Cape Newenham. It is found along the north shore from west of Bird Rock to east of Air Force Cove.

TNWR Mount: Cape Newenham, P. Caswell, 23 Jun 95  
 UA Mount: Cape Newenham, L. Haggblom and L. Jemison, 4 Jul 93 (Listed as Papaver radicum)  
 HH Mount: Cape Newenham, P. Caswell, 15 Jun 95

Papaver alaskanum Hult. Alaska Poppy

(To avoid future confusion, I have retained Hulten's nomenclature in this instance. Kartesz includes this taxon in Papaver lapponicum (Tolm.) Nordh. subsp. occidentale (Lundstr.) Knaben.)

Kagati Lake (R. Lipkin), Kanektok River, Nimgun Lake, Nimgun Creek, Mountain lake south of Ungluayagat at Goodnews Lake (RJ), Cape Newenham, Cape Peirce (LH), High Lake, Togiak River, Kashaik Mountain, Kaskaik River, Heart Lake

Lipkin records Papaver alaskanum at Kagati Lake and Cape Newenham. Reported by Dick (Schandelmeier) at Cape Peirce.

UA Mount: Cape Newenham, S. S. Talbot, 29 Aug 81  
 TNWR Mount: Cape Peirce, Lisa Haggblom, 28 Jun 89  
 Cape Peirce, Lisa Haggblom, 4 Jul 89  
 Mountain lake south of Ungluayagat at Goodnews Lake, Rebecca Joyce, 4 Aug 85  
 Kashaik River, J. Culbertson & S. Harper, 5 Jul 94  
 Togiak River, J. Culbertson and S. Harper, 26 Jun 94

UA Mount: The following poppies provided to UA Museum have been identified by Dr. Murray as Papaver alaskanum. The specimens manifest numerous forms. On one occasion, Dr. Murray said that, if he took the Russian approach to taxonomy, he would split them into several species. On another occasion he said there were at least five forms without names. Dr. Murray is considering finding someone interested in chemically analyzing the specimens' alkaloids.

Cape Peirce, P. Caswell, 3 Jul 92  
 Cape Peirce, P. Caswell, 4 Jul 92  
 Cape Peirce, P. Caswell, 7 Jul 92  
 Cape Peirce, P. Caswell, 8 Jul 92  
 Kanektok River, P. Caswell, 19 Aug 94  
 Nimgun Lake, P. Caswell, 15 Jun 94 (3 mounts)  
 Nimgun Lake, P. Caswell, 16 Jun 94

Nimgun Lake, P. Caswell, 18 Jun 94  
 Nimgun Creek, P. Caswell, 3 Jul 94  
 Kashaik River - Two miles from outlet, J. Culbertson and S. Harper, 5 Jul 94  
 Heart Lake, P. Caswell, 5 Aug 94 (3 mounts)  
 Heart Lake, P. Caswell, 6 Aug 94 (4 mounts)  
 Heart Lake, P. Caswell, 4 Aug 94  
 Heart Lake, P. Caswell, 8 Aug 94  
 Heart Lake, P. Caswell, 10 Aug 94 (4 mounts)  
 Heart Lake, P. Caswell, 12 Aug 94 (4 mounts)

Papaver lapponicum (Tolm.) Nordh. subsp. occidentale (Lundstr.) Knaben Arctic Poppy

Kashaik River, and possibly the mountain lake south of Ungluayagat at Goodnews Lake (RJ) (UA has been furnished tentatively determined specimens from Kanektok River (RM46, JC & JP), and Cape Newenham.)

TNWR Mount: Kashaik River - Two miles above confluence with Togiak River, J. Culbertson and S. Harper, 5 Jul 94  
 Mountain lake south of Ungluayagat at Goodnews Lake, R. Joyce, 4 Aug 85 (A very tentative determination by Caswell, who is notorious for misidentifying poppies.)

UA Mount: Kashaik River - Two miles from outlet, J. Culbertson and S. Harper, 5 Jul 94

HH Mount: Kanektok River, P. Caswell, 26 Aug 95 (Determination by Caswell)

FUMARIACEAE (Earth Smoke Family)

Corydalis pauciflora (Steph.) Pers. Few Flowered Corydalis

(Kartesz does not recognize variety albiflora Pers. It is shown below only to indicate locations of white few flowered corydalis plants within the refuge.)

Kagati Lake (BK), Nimgun Lake, Cape Newenham, Cape Peirce (LH), High Lake, Amanka Lake, Heart Lake

Recorded by Lipkin at Kagati Lake.  
 Hulten indicates collection near Goodnews

TNWR Mount: Cape Peirce, Lisa Haggblom, 17 Jun 89  
 Kagati Lake, B. Kaplin, 26 Jun 86 (This is not a great specimen, but it looks suspiciously like Corydalis sempervirens.)

UA Mount: Kagati Lake, P. Caswell, 15 Jun 92  
 Amanka Lake, K. Roberson, 2 Jul 65  
 Cape Newenham, P. Caswell, 26 Jun 95  
 Cape Peirce, L. S. Dick, 7 Jun 70

Specimens fitting Hulten's description of Corydalis pauciflora (Steph.) Pers. var. albiflora

Pors. were found at Nimgun Lake (Variation albiflora was quite common at Nimgun Lake. Between Nimgun Lake and the lake to its immediate east were four colors of Corydalis: dark blue, white, white edged with blue, and cream. Presumably the cream coloured blossoms were senescent white blossoms.)

BRASSICACEAE (Mustard Family) (Shown in Hulten as Cruciferae)

Subularia aquatica L. Awiwort

Kanektok River (RM49), Nanavochtshak Lake, Togiak Lake, Togiak River

TNWR Mount: Ponds near "Big Bend" in Togiak River, P. Caswell, 4 Aug 92  
 UA Mount: Ponds near "Big Bend" in Togiak River, P. Caswell, 4 Aug 92

Thlaspi arcticum Pors.

Kagati Lake (two plants observed), High Lake (Population on a scree slope west of the north end of the lake is estimated to exceed 1,000 plants), Heart Lake (At least twenty plants were observed on mountains south of Heart Lake)

TNWR Mount: Heart Lake, P. Caswell, 8 Aug 94  
 UA Mount: Heart Lake, P. Caswell, 8 Aug 94  
 Heart Lake, P. Caswell, 10 Aug 94  
 HH Specimen: Kagati Lake - on scree slope above south end of lake on east face of the mountain at the base of the peninsula, P. Caswell, Jun 92

Cochlearia groenlandica L. Scurvy Grass

(Shown in Hulten as Cochlearia officinalis L. subsp. oblongifolia (DC.) Hult. and as Cochlearia officinalis L. subsp. arctica (Schlecht.) Hult.)

Cape Newenham, Cape Peirce (There appears to be a continuum between large and small plants and silicle shapes. Several specimens from Cape Peirce are quite delicate and may represent the form Hulten refers to as subsp. arctica (Schlecht.) Hult.)

Lipkin records Cochlearia officinalis subsp. oblongifolia at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 6 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 6 Jul 92  
 Cape Peirce - northeast shore of Nanvak Bay, L. S. Dick,  
 28 Jun 70  
 HH Mount: Cape Peirce, P. Caswell, 6 Jul 92

Aphragmus eschscholtzianus Andrz. Aphragmus

Kagati Lake, Nimgun Lake, High Lake, Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 12 Aug 94 (in seed)  
 Kagati Lake, P. Caswell, 24 Jun 92 (in bloom)

UA Mount: Kagati Lake, P. Caswell, 24 Jun 92  
 Nimgun Lake, P. Caswell, 26 Jun 94  
 Heart Lake, P. Caswell, 7 Aug 94  
 US Forest Service Herbarium, Sitka, Alaska Mount:  
 High Lake, P. Caswell, 22 Jul 95

Eutrema edwardsii R. Br. Eutrema

Cape Peirce

UA Mount: Cape Peirce - upland heath tundra, L. S. Dick,  
 27 Jun 70

Barbarea orthoceras Ledeb. Winter Cress

Kagati Lake, Kanektok River, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake,  
 Geshiak Creek (A. Aderman & R. MacD.), Togiak River, Banding Lake, Tuklung Lake,  
 Ualik Lake, Amanka Lake, Sunshine Creek, Heart Lake  
 Hulten indicates collection near Goodnews.

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 4 Jul 92  
 Cape Peirce - northeast shore of Nanvak Bay, L. S. Dick,  
 25 Jun 70  
 Kagati Lake, L. Hutson, 3 Jul 74  
 Ualik Lake (Igushik River Lakes), K. Roberson,  
 Jul 65  
 Amanka Lake, M. S. Dickson, 2 Jul 70

Rorippa palustris (L.) Bess. Yellow Cress, Marsh Yellow Cress

Kanektok River, Quinhagak beach, Arolik River, Nimgun Creek, Pungokepuk Creek,  
 Togiak River, Kashaik River outlet, Igushik River, Kakanak, Milk Creek

UA Mount (subspecies not listed):  
 Kanektok River, P. Caswell, 28 Jul 92

Rorippa palustris (L.) Bess. subsp. occidentalis (S. Wats.) Abrams Yellow Cress, Marsh Yellow Cress

(Shown in Hulten as Rorippa islandica (Oeder) Borb. subsp. islandica and shown in  
 Rollins as Rorippa palustris (L.) Besser var. occidentalis (S. Wats.) Rollins)

Igushik River

Hulten indicates collection at Cape Newenham.

TNWR Mount: Igushik River, P. Caswell, 26 Jul 94

Rorippa palustris (L.) Bess. subsp. fernaldiana (Butters & Abbe) Jonsell Yellow Cress, Marsh Yellow Cress

(Shown in Hulten as Rorippa islandica (Oeder) Borb. subsp. Fernaldiana (Butt. & Abbe) Hult., but in his 1973 supplement Hulten calls this taxon Rorippa palustris (L.) Bess. Subsp palustris. UA Museum calls this taxon Rorippa palustris subsp. palustris. Shown in Rollins as Rorippa palustris (L.) Besser var. feraldiana (Butters & Abbe) Stuckey)

Kanektok River, Kashaik River outlet (JC & SH), Pungokepuk Creek (JM & R. MacD.), Togiak River, Igushik River, Kanakanak, Milk Creek

Hulten indicates collection at Cape Newenham.

TNWR Mount: "Big Bend" in Togiak River, P. Caswell, 5 Aug 92

Rorippa palustris (L.) Bess. subsp. hispida (Desv.) Jonsell Hairy Yellow Cress  
(Shown in Hulten as Rorippa hispida (Desv.) Britt. var. hispida and shown in Rollins as Rorippa palustris (L.) Besser var. hispida (Desv.) Rydb.)

Kanektok River, Quinhagak beach, Arolik River (A. Archibeque & R. MacD.), Nimgun Creek, Togiak River, Igushik River, Kanakanak

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92

UA Mount: Kanektok River, P. Caswell, 26 Jul 92 (UA listed subspecies.)

Cardamine bellidifolia L. Alpine Bitter Cress

Kagati Lake, Kanektok River (RM48, JC & JP) (RM57), Nimgun Lake, Nimgun Creek, Pyramid Mountain, Cape Newenham, Slug Mountain, High Lake, Nanavochtshak Lake, Kashaik Mountain, Heart Lake

Recorded by R. Lipkin at Kagati Lake.

Hulten indicates collection at Cape Newenham.

TNWR Mount: Slug Mountain, P. Caswell, 15 Jul 92

UA Mount: Nimgun Lake, P. Caswell, 15 Jun 94 (blue flowers)

Slug Mountain, L. S. Dick, 28 Jul70

Cardamine pratensis L. var. angustifolia Hook. Cuckoo Flower

(Shown in Hulten as Cardamine pratensis L. subsp. angustifolia (Hook.) O. E. Schulz)

Kagati Lake, Kanektok River, Cape Newenham, Cape Peirce (LJ), High Lake, Togiak Lake, Pungokepuk Lake (JM & R. MacD.), Togiak River

Hulten indicates collections at Cape Newenham and on Nushagak Peninsula.

TNWR Mount: Togiak River, J. Culbertson, 2 Jul 92

UA Mount: Togiak River -28 km upstream from Togiak, J. Culbertson, 29 Jun 92

Cape Peirce, L. S. Dick, 21 Jun 70

Cardamine oligosperma Nutt. var. kamtschatica (Regel) Detling Bitter Cress, Western Bittercress  
(Shown in Hulten as Cardamine umbellata Greene)

Kagati Lake, Kanektok River (RM55, JC & JP), Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce, High Lake, Igushik River, Heart Lake

Hulten indicates collection at Cape Newenham

TNWR Mount: Cape Peirce, P. Caswell, 4 Jul 92  
Igushik River, P. Caswell, 26 Jul 94  
UA Mount: Cape Peirce, P. Caswell, 8 Jul 92  
Cape Peirce, L. S. Dick, 29 Jun 70  
Igushik River, P. Caswell, 26 Jul 94  
HH Mount: Igushik River, P. Caswell, 26 Jul 94

Cardamine purpurea Cham. & Schlecht. Purple Cress

(Kartesz does not recognize variety albiflora Hult. It is included in this taxon. It is shown below only to indicate where white purple cress is found within the refuge.)

Kagati Lake (BK), Kanektoik River (RM46, JC & JP), Nimgun Lake, Cape Newenham (LH & LJ), Cape Peirce (LH)

TNWR Mount: Kagati Lake, B. Kaplin, 29 Jun 86  
Cape Peirce, Lisa Haggblom, 11 Jun 89  
UA Mount: Cape Peirce, P. Caswell, 12 Jul 92  
Cape Peirce, P. Caswell, 5 Jun 70

Specimens fitting Hulten= description of Cardamine purpurea Cham. & Schlecht. var. albiflora Hult.

Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce (LJ)

TNWR Mount: Cape Peirce, L. Jemison, 20 Jun 89

Draba nivalis Liljebl. Snow Draba, Rock Cress

Kagati Lake (Dr. Lipkin), Kanektok River (RM41) (RM55 JC&JP) (RM57) (RM63 JC), Nimgun Lake, Nimgun Creek, Cape Peirce, High Lake, Killian Ridge, Heart Lake

Recorded by Lipkin at Kagati Lake.

Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Nimgun Creek, P. Caswell, 7 Jul 94  
UA Mount: Nimgun Lake, P. Caswell, 17 Jun 94  
Nimgun Lake, P. Caswell, 18 Jun 94  
Heart Lake, P. Caswell, 3 Aug 94

Draba lonchocarpa Rydb.

Kagati Lake

This plant keys to Draba kamtschatica in Hulten's key. Use Mulligan's key. Contrary to

Hulten's description, Draba lonchocarpa has stellate hairs on scapes.)

UA Mount of Draba lonchocarpa (subspecies not listed):

Kagati Lake, P. Caswell, 28 Jun 92

Draba lonchocarpa Rydb. var. lonchocarpa

Nimgun Lake, Nimgun Creek, Heart Lake

TNWR Mount: Nimgun Lake, P. Caswell, 28 Jun 94

UA Specimen: Nimgun Lake, P. Caswell, 16 Jun 94

Nimgun Creek, P. Caswell, 7 Jul 94

Heart Lake, P. Caswell, 10 Aug 94

Draba lonchocarpa Rydb. var. vestita O. E. Schulz

Kagati Lake, Heart Lake

TNWR Mount: Kagati Lake, P. Caswell, 23 Jun 92

UA Specimen: Heart Lake, P. Caswell, 12 Aug 94

Draba lactea Adams Rock Cress

Kagati Lake, Nimgun Lake, High Lake, Heart Lake

TNWR Mount: Kagati Lake, P. Caswell, 28 Jun 92

UA Mount: Kagati Lake, P. Caswell, 28 Jun 92

Draba fladnizensis Wulf. Rock Cress

Nimgun Lake, High Lake, Heart Lake

TNWR Mount: Nimgun Lake, P. Caswell, 15 Jun 94

UA Mount: Nimgun Lake, P. Caswell, 15 Jun 94

UA Specimen: High Lake, P. Caswell, 4 Aug 95

Draba alpina L. Alpine Draba, Alpine Rockcress

(Includes former Draba Eschscholtzii Pohle)

Kagati Lake (Dr. Lipkin), Cape Newenham, High Lake, Heart Lake

Recorded by Lipkin at Kagati Lake and Cape Newenham.

TNWR Mount: Heart Lake, P. Caswell, 5 Aug 94

UA Specimen: Heart Lake, P. Caswell, 10 Aug 94

Cape Newenham, P. Caswell, 15 Jun 95

Draba corymbosa R. Br. Rock Cress

(Shown in Hulten as Draba macrocarpa Adams Rock Cress UA Museum and Rollins call this taxon Draba corymbosa R. Br. ex DC. Kartesz lists both names as valid, but I doubt that he applies them to the same plant.)

High Lake, Heart Lake

TNWR Mount: High Lake, P. Caswell, 22 Jul 95  
 UA Mount: Heart Lake, P. Caswell, 12 Aug 94  
 HH Mount: High Lake, P. Caswell, 22 Jul 95

Draba stenopetala Trautv. Pincushion Rock Cress

Kagati Lake, Kanektok River (RM63 JC), Nimgun Lake, Heart Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Kagati Lake - mountains northeast of lake, P. Caswell, 24 Jun 92  
 Heart Lake, P. Caswell, 5 Aug 94  
 UA Mount: Kagati Lake - mountains northeast of lake, P. Caswell, 24 Jun 92  
 Nimgun Lake, P. Caswell, 15 Jun 94

Draba stenoloba Ledeb. Rock Cress

Kashaiak Mountain, Heart Lake

TNWR Mount: Kashaiak Mountain, P. Caswell, 2 Aug 92  
 UA Mount: Kashaiak Mountain, P. Caswell, 2 Aug 92

Draba glabella Pursh Rock Cress

(Shown in Hulten as Draba hirta L.)

Kanektok River (RD & AW)

TNWR Mount: Kanektok River (RM45), R. Doyle and A. Wheeler, 28 Jun 94  
 UA Mount: Kanektok River, R. Doyle and A. Wheeler, 28 Jun 94  
 HH Mount: Kanektok River - 45 miles upriver from Quinhagak, R. Doyle and  
 A. Wheeler, 28 Jun 94

Draba longipes Raup Rock Cress

Kagati Lake, Kanektok River (RM57 JC), Nimgun Lake, High Lake, Heart Lake

TNWR Mount: Kagati Lake - mountains northeast of lake, P. Caswell, 24 Jun 92  
 UA Mount: Kagati Lake - mountains northeast of lake, P. Caswell, 24 Jun 92  
 Nimgun Lake, P. Caswell, 17 Jun 94  
 Heart Lake, P. Caswell, 6 Aug 94  
 UA Specimen: High Lake, P. Caswell, 27 Jul 95  
 HH Mount: Kagati Lake - mountains northeast of lake, P. Caswell, 24 Jun 92

Draba borealis DC.

Cape Newenham

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Cape Newenham, P. Caswell, 1 Jul 95  
 Cape Newenham, P. Caswell, 5 Jul 95  
 UA Mount: Cape Newenham, P. Caswell, 1 Jul 95  
 HH Mount: Cape Newenham, P. Caswell, 1 Jul 95

Smelowskia pyriformis Drury & Rollins Smelowskia

Nimgun Lake

TNWR Mount: Nimgun Lake, P. Caswell, 15 Jun 94 (3 mounts)  
 UA Mount: Nimgun Lake, P. Caswell, 16 Jun 94

Arabis lyrata L. var. kamchatica Fisch ex DC. Rock Cress

(Shown in Hulten as Arabis arenicola (Richards.) Gelert var. pubescens (S. Wats.) Gelert. Kartesz does not recognize variety pubescens (S. Wats.) Gelert. Rollins (1993) writes, "Hulten (1968) listed var. pubescens from northwest Alaska, but Hopkins (1937) suggested that the inclusion of Alaska in the early records is based on errors in the identification of specimens that served as vouchers. I have not seen any Alaskan specimens of Arabis arenicola." I have found specimens resembling Hulten's drawing growing in shady places in southwest Alaska. C. Parker, UA Museum, pronounced the specimens Arabis lyrata. Thus, the mounts shown below are not Arabis arenicola but a form of Arabis lyrata.

High Lake, Geshiak Creek (A. Aderman & R. MacD.), Togiak River

TNWR Mount: Geshiak Creek, R. MacDonald and A. Aderman, 24 Jun 95  
 HH Mount: "Big Bend" in Togiak River, P. Caswell, 5 Aug 92

Arabis lyrata L. var. kamchatica Fisch. ex DC. Rock Cress, Kamchatka Rockcress

(Shown in Hulten as subsp. kamchatica (Fisch.) Hult.)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak Lake (RJ)(BK), Togiak River, Kashaik Mountain, Heart Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Togiak Lake, B. Kaplin, 8 Jul 86  
 Togiak Lake, B. Kaplin, 4 Jul 86  
 Togiak Lake, Rebecca Joyce, 14 Jul 85  
 Togiak Lake, Rebecca Joyce, 26 Jun 85  
 UA Mount: Kanektok River, P. Caswell, 28 Jul 92  
 Kagati Lake, P. Caswell, 24 Jun 92  
 Togiak Lake, M. Dick, 3 Aug 73  
 Kagati Lake, L. Hutson, 3 Jul 74  
 Cape Peirce, L. S. Dick, 26 Jun 70

Erysimum Pallasii (Pursh) Fern. Pallas Wallflower

Kagati Lake (Dr. Lipkin), Heart Lake

Recorded by Lipkin at Kagati Lake.

HH Mount: Heart Lake, P. Caswell, 12 Aug 94

Hartwick College donated this mount to UA Museum in spring 1996.

UA Museum has not yet verified the determination nor entered the mount into its computer.

Parrya nudicaulis (L.) Boiss. Parrya, Parry's Wall Flower

(Hulten shows three subspecies, nudicaulis, interior Hult., and septentrionalis Hult., and a variety, grandiflora Hult., which are no longer recognized. The invalid subspecies are shown below only to indicate the appearance of the taxon in several locations within the refuge.)

Specimens fitting Hulten's description of Parrya nudicaulis (L.) Regel subsp. nudicaulis were found at Kagati Lake, Kanektok River (RM55 JC & JP), Nimgun Lake, Cape Peirce and Heart Lake

TNWR Mount: Kagati Lake, P. Caswell, 19 Jun 92

UA Mount: Kagati Lake, P. Caswell, 15 Jun 92 (UA listed subspecies.)  
Cape Peirce, L. Schandelmeier, 28 Jul 70 (UA listed

subspecies.)

HH Mount: Cape Peirce, P. Caswell, 3 Jul 92

Specimens fitting Hulten's description of Parrya nudicaulis (L.) Regel subsp. interior Hult. were found at Kanektok River (RM57).

TNWR Spec: Kanektok River (RM57), P. Caswell, 27 Aug 95

#### DROSERACEAE (Sundew Family)

Drosera anglica Huds. Long-leaved Sundew

Nushagak Peninsula (RJ), Kikertalik Lake, Kanakanak, Shannon's Pond

TNWR Mount: Nushagak Peninsula, Rebecca Joyce, 22 Jul 85

UA Mount: Kikertalik Lake, P. Caswell, 19 Jul 94

Drosera rotundifolia L. Round-leaved Sundew

Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake (WK), Tuklung Lake, Igushik River, Kanakanak, Shannon's Pond

TNWR Mount: Kikertalik Lake, P. Caswell, 20 Aug 92

Kikertalik Lake, W. Kirk, Sep 90 (det. S. Talbot)

UA Mount: Togiak River, P. Caswell, 4 Aug 92

## CRASSULACEAE (Stonecrop Family)

Sedum integrifolium (Raf.) A. Nels. subsp. integrifolium Roseroot, Rosewort, King's Crown  
(Shown in Hulten as Sedum rosea (L.) Scop. subsp. integrifolium (Raf.) Hult. UA  
Museum calls this taxon Rhodiola integrifolia.)

Kagati Lake (BK), Kanektok River, Nimgun Lake (Collected a yellow form near Nimgun Lake), Nimgun Creek, Pyramid Mountain, Cape Newenham (LJ) (An extremely purple color as well as the normal one), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak Lake (RJ), Togiak River, Kikertalik Lake, Tuklung Lake (HJ), Snake River, Heart Lake (Collected a senescent specimen that appeared to have been yellow at Heart Lake.)

Hulten indicates collection near Cape Newenham.  
Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Togiak Lake, Rebecca Joyce, 18 Jul 85  
Kagati Lake, B. Kaplin, 26 Jun 86  
Tuklung Lake, H. Johnson, no date recorded

UA Mount: Kagati Lake, P. Caswell, 18 Jun 92  
Kagati Lake vicinity, S. Martin, 27 Jun 84  
Kagati Lake, L. Hutson, 3 Jul 74  
Snake River area - 24 km southwest of Dillingham, D. Mesiar, 17 Jun 79  
Kanektok River - 5 km from Quinagak, D. Ashby, 18 Jun 83  
Cape Peirce, L. S. Dick, 21 Jun 70

## SAXIFRAGACEAE (Saxifrage Family)

Leptarrhena pyrolifolia (D. Don) Ser. Leather Leaved Saxifrage

High Lake, Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 6 Aug 94 (in bloom)  
Heart Lake, P. Caswell, 5 Aug 94 (in fruit)

UA Mount: High Lake, P. Caswell, 18 Jul 95

Saxifraga oppositifolia L. subsp. oppositifolia Purple Mountain Saxifrage, French Knot Moss

Kanektok River (RM55 JC & JP), Nimgun Lake, Cape Newenham, Cape Peirce (LH), High Lake, Heart Lake

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Cape Peirce, Lisa Haggblom, 28 May 89  
UA Mount (Subspecies not listed):

Nimgun Lake, P. Caswell, 16 Jun 94  
Cape Peirce, L. S. Dick, 3 Jun 70

Saxifraga eschscholtzii Sternb. Cushion Saxifrage, Ciliate Saxifrage, Barnacle Saxifrage

Kagati Lake, Kanektok River (RM57), Nimgun Lake, Nimgun Creek, Cape Newenham (Dr. Lipkin), Cape Peirce, High Lake, Heart Lake

Recorded by Lipkin at Kagati Lake and Cape Newenham.  
Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 7 Jul 92  
UA Mount: Kagati Lake, P. Caswell, 22 Jun 92  
Cape Peirce, L. Schandelmeier, 7 Jun 73

Saxifraga serpyllifolia Pursh Thyme Leaved Saxifrage

Kanektok River (RM46 JC & JP), Nimgun Lake, Cape Newenham (LH & LJ), Cape Peirce (LH)(LJ), Kashaik Mountain (JC), Heart Lake

Recorded by Lipkin at Cape Newenham.  
Hulten indicates collections at Cape Newenham.

TNWR Mount: Cape Peirce, Lisa Haggblom, 2 Jul 89  
Cape Peirce, Lisa Haggblom, 24 Jun 89  
UA Mount: Kashaik Mountain, Jennifer Culbertson, 17 Jul 92  
Cape Peirce, L. S. Dick, 6 Jul 70

Saxifraga hirculus L. Bog Saxifrage, Yellow Marsh Saxifrage

Kanektok River, Nimgun Creek, Mountain lake south of Ungluayagat at Goodnews Lake (RJ), Cape Newenham (LJ), Cape Peirce (RJ)(LH), High Lake, Pungokebuk Creek (JC & SH), Heart Lake

Hulten indicates collections at Cape Newenham, Kagati Lake and near Kulukak Bay.  
Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, L. Jemison, 4 Jul 89  
Cape Peirce, P. Caswell, 4 Jul 92  
Cape Peirce, Rebecca Joyce, 18 Aug 85  
Mountain lake south of Ungluayagat, Goodnews Lake, Rebecca Joyce, 4 Aug 85  
UA Mount: Cape Peirce, L. S. Dick, 20 Jul 70

Saxifraga flagellaris Willd. subsp. setigera (Pursh) Tolm. Spiderplant, Whiplash Saxifrage, Flagellate Saxifrage

Kagati Lake (Dr. Lipkin), Kanektok River (RD & AW), Nimgun Lake, Nimgun Creek (abundant), Cape Newenham, Cape Peirce, High Lake, Heart Lake

Recorded by Lipkin at Kagati Lake.

Hulten indicates collections from Cape Newenham and Goodnews and indicates that this subspecies was described from plants collected at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 7 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 7 Jul 92  
 Cape Peirce, L. S. Dick, 6 Jul 70  
 HH Mount: Cape Peirce, P. Caswell, 7 Jul 92

Saxifraga bronchialis L. subsp. funstonii (Small) Hult. Spotted Saxifrage, Matted Saxifrage

Kagati Lake (BK), Kanektok River, Nimgun Lake, Nimgun Creek, Goodnews River (RM38 KN & SH), Cape Newenham (LJ), Cape Peirce, High Lake, Nanavochtshak Lake, Togiak Lake (RJ), Togiak River, Killian Ridge, Heart Lake

Hulten indicates collection near Cape Newenham.  
 Reported by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Kagati Lake, B. Kaplin, 8 Jul 86  
 Togiak Lake, Rebecca Joyce, 15 Jul 85  
 UA Mount: Kanektok River, P. Caswell, 27 Jul 92  
 Kagati Lake, L. Hutson, 3 Jul 74

Saxifraga nelsoniana D. Don Cordate Leaved Saxifrage, Heart Leaved Saxifrage, Brook Saxifrage

(Shown in Hulten as Saxifraga punctata L.)

Kagati Lake, Kanektok River (RD & AW), Arolik River (A. Archibeque & R. MacD.), Nimgun Lake, Nimgun Creek, Goodnews Lake (BK), Mountain lake south of Ungluayagat at Goodnews Lake, Cape Newenham (LH & LJ), Cape Peirce, High Lake, Nanavochtshak Lake, Kashaik Mountain, Togiak River at Rainbow Creek, Heart Lake

UA Mount: Cape Peirce, P. Caswell, 4 Jul 92  
 Cape Peirce, L. S. Dick, 23 Jun 70

Saxifraga nelsoniana D. Don subsp. nelsoniana Cordate Leaved Saxifrage, Heart Leaved Saxifrage, Brook Saxifrage

(Shown in Hulten as Saxifraga punctata L. subsp. Nelsoniana (D. Don) Hult.)

Kanektok River (RD & AW), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, Heart Lake

Hulten indicates collection at Cape Newenham and indicates that this subspecies was described from plants collected at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 8 Jul 92

Saxifraga nelsoniana D. Don subsp. insularis (Hulten) Hulten Cordate Leaved Saxifrage, Heart Leaved Saxifrage, Brook Saxifrage

(Shown in Hulten as Saxifraga punctata L. subsp. insularis Hult.)

Arolik River (A. Archibeque & R. MacD.), Cape Newenham, High Lake

TNWR Mount: Cape Newenham, P. Caswell, 18 Jun 95

Saxifraga nelsoniana D. Don subsp. pacifica (Hulten) Hulten Cordate Leaved Saxifrage, Heart Leaved Saxifrage, Brook Saxifrage

(Shown in Hulten as Saxifraga punctata L. subsp. pacifica Hult.)

Kagati Lake, Kanektok River (RM55 JC&JP), Goodnews Lake (BK), Cape Newenham, High Lake, Heart Lake

TNWR Mount: Goodnews Lake, B. Kaplin, 21 Jul 86 (2 mounts)

Saxifraga nelsoniana D. Don subsp. porsildiana (Calder & Savile) Hulten Cordate Leaved Saxifrage, Heart Leaved Saxifrage, Brook Saxifrage

(Shown in Hulten as Saxifraga punctata L. subsp. Porsildiana Calder & Savile)

Kagati Lake, Kanektok River, Mountain lake south of Ungluayagat at Goodnews Lake (RJ), Cape Newenham (LH & LJ), Cape Peirce, High Lake, Nanavochtshak Lake, Kashaik Mountain

TNWR Mount: Kashaik Mountain, J. Culbertson, 17 Jul 92  
Mountain lake south of Ungluayagat at Goodnews Lake,  
Rebecca Joyce, 4 Aug 85

UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92 (UA listed subspecies.)

Saxifraga nelsoniana D. Don subsp. carlottae (Calder & Savile) Hulten Cordate Leaved Saxifrage, Heart Leaved Saxifrage, Brook Saxifrage

(Shown in Hulten as Saxifraga punctata L. subsp. Charlottae Calder & Savile)

Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Togiak River at Rainbow Creek, Nanavochtshak Lake, Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 5 Aug 94

UA Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92 (UA listed subspecies.)

Saxifraga spicata D. Don Spiked Saxifrage

High Lake, Upper Togiak Lake (JC & SH), Togiak Lake, Kemuk Creek (A. Archibeque photo), Togiak River, Heart Lake

TNWR Mount: Togiak Lake, P. Caswell, 10 Aug 92

UA Mount: Togiak Lake, P. Caswell, 10 Aug 92

Saxifraga cernua L. Bulblet Saxifrage, Nodding Saxifrage

Kanektok River, High Lake, Heart Lake

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92

UA Mount: Kanektok River, P. Caswell, 26 Jul 92

Saxifraga sibirica L.

(Shown in Hulten as Saxifraga bracteata D. Don. This taxon includes the former Saxifraga rivularis L. var. laurentiana (Ser.) Engler.)

Cape Newenham (LJ-92), Cape Peirce (LH)(LJ)

Lipkin records Saxifraga bracteata at Cape Newenham.

TNWR Mount: Cape Newenham, L. Jemison, 13 Jul 92

UA Mount: Cape Peirce, P. Caswell, 8 Jul 92

Cape Peirce, L. Schandelmeier, Aug 70

Cape Peirce, L. S. Dick, 3 Jul 70

HH Mount: Cape Peirce, P. Caswell, 6 Jul 92

Saxifraga rivularis L. Brook Saxifrage, Alpine Brook Saxifrage

(Kartesz does not recognize varieties rivularis and flexuosa (Sternb.) Engler & Irmsch.)

Kagati Lake, Kanektok River (RD &AW), Nimgun Lake, Nimgun Creek, Cape Newenham, High Lake, Nanavochtshak Lake, Kashaik Mountain, Togiak River at Rainbow Creek, Heart Lake

Lipkin records var. flexuosa at Kagati Lake.

Hulten indicates collection near Kagati Lake.

TNWR Mount: Nimgun Creek, P. Caswell, 7 Jul 94

UA Mount: Togiak River at Rainbow Creek, P. Caswell 8 Aug 92

Nanavochtshak Lake, P. Caswell, 9 Aug 92

Saxifraga Lyallii Engler subsp. Hultenii (Calder & Savile) Calder & Savile Red-Stemmed Saxifrage

Kanektok River (RM55 JC & JP), Nimgun Lake, Nimgun Creek, High Lake, Heart Lake

TNWR Mount: Upper Nimgun Creek, P. Caswell, 29 Jun 94

UA Mount: Nimgun Creek, P. Caswell, 7 Jul 94 (UA did not list subspecies.)

Saxifraga calycina Sternb. subsp. calycina Purple Headed Saxifrage

(Shown in Hulten as Saxifraga davurica Willd. subsp. grandipetala (Engler & Irmsch.) Hult.)

Kanektok River (RM57), Cape Newenham, High Lake, Heart Lake (Much commoner than subsp. unalaschensis on scree slope in cirque south of Heart Lake)

TNWR Mount: Heart Lake, P. Caswell, 5 Aug 94

UA Mount: Heart Lake, P. Caswell, 5 Aug 94 (UA did not list a subspecies.)

Saxifraga calycina Sternb. subsp. unalaschensis (Sternb.) Hulten Purple Headed Saxifrage

(Shown in Hulten as Saxifraga unalascensis Sternb.)

Nimgun Lake, Cape Newenham (Dr. Lipkin), Kashaik Mountain, Heart Lake  
Recorded by Lipkin at Cape Newenham.  
Hulten indicates collection at Cape Newenham.

TNWR Mount: Heart Lake, P. Caswell, 6 Aug 94  
HH Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

Saxifraga nivalis L. Snow Saxifrage, Alpine Saxifrage

Kagati Lake, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake,  
Ongivinuck River (JC), Killian Ridge, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Ongivinuck River (RM4), J. Culbertson, 1994  
UA Mount: Cape Peirce - south facing cliff slope, L.  
Schandelmeier, 7 Jun 73  
Cape Peirce, L. Schandelmeier, 1970

Saxifraga tenuis (Wahlenb.)H. Sm. ex Lindm.

(Shown in Hulten as Saxifraga nivalis L. var. tenuis Wahlenb.)

Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 6 Aug 94

Saxifraga reflexa Hook. Yukon Saxifrage, Reflexed Saxifrage

Kagati Lake, Kanektok River (RD & AW), Nimgun Lake, Nimgun Creek, Upper Togiak  
Lake (JC & SH), Izavecknik River (JC), Heart Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Izavecknik River, J. Culbertson, 23 Jul 93  
UA Mount: Kagati Lake, P. Caswell, 17 Jun 92  
Kanektok River, R. Doyle and A. Wheeler, 28 Jun 94

Saxifraga hieracifolia Waldst. & Kit. Stiff-stemmed Saxifrage, Rusty Saxifrage, Hawk Leaf  
Saxifrage, Hawkweed Leaf Saxifrage

Kagati Lake, Kanektok River (RM55 JC & JP), Nimgun Creek, Cape Newenham (LH &  
LJ), Cape Peirce (LH), Mountain lake south of Ungluayagat at Goodnews Lake (RJ),  
Kashaik Mountain

Hulten indicates collection at Cape Newenham.

TNWR Mount: Mountain lake south of Ungluayagat, Goodnews Lake, Rebecca  
Joyce, 4 Aug 85

UA Mount: Cape Peirce, P. Caswell, 3 Jul 92  
 Cape Peirce, L. S. Dick, 22 Jun 70  
 Nimgun Creek, P. Caswell, 7 Jul 94

Saxifraga foliolosa R. Br. Grained Saxifrage, Foliose Saxifrage  
 (Shown in Hulten as Saxifraga foliolosa R. Br. var. foliolosa)

Kagati Lake (Dr. Lipkin), Cape Newenham (common on disturbed soil), Cape Peirce, High Lake, Nanavochtshak Lake

Lipkin records var. foliolosa at Kagati Lake and Cape Newenham.

TNWR Mount: Cape Newenham, P. Caswell, 24 Jun 95  
 UA Mount: Cape Newenham, P. Caswell, 26 Jun 95  
 Cape Peirce, L. S. Dick, 24 Jun 70

Saxifraga cespitosa L. Tufted Saxifrage  
 (Shown in Hulten as Saxifraga caespitosa L.)

Heart Lake

UA Mount: Heart Lake, P. Caswell, 6 Aug 94  
 HH Mount: Heart Lake, P. Caswell, 4 Aug 94

Heuchera glabra Willd. Alpine Heuchera, Alumroot

High Lake, Nanavochtshak Lake, Togiak Lake, Kemuk Creek (A. Archibeque photo),  
 Togiak River

TNWR Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92  
 UA Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92

Chrysosplenium tetrandrum (Lund) T. Fries Northern Water Carpet

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Togiak Lake, Togiak River, Heart Lake

Recorded by Lipkin at Kagati Lake and Cape Newenham.

TNWR Mount: Kanektok River, P. Caswell, 28 Jul 92  
 UA Mount: Kanektok River, P. Caswell, 28 Jul 92

Chrysosplenium wrightii Franch. & Savigny Golden Saxifrage, Wright Water Carpet, Wright's Little Water Carpet

Kagati Lake (Dr. Lipkin), High Lake, Heart Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Heart Lake, P. Caswell, 5 Aug 94

UA Spec: High Lake, P. Caswell, 22 Jul 95

Parnassia multisetata (Ledeb.) Fern. Northern Grass of Parnassus, Bog Star  
(Shown in Hulten as Parnassia palustris L. subsp. neogaea (Fern.) Hult.)

Kagati Lake, Kanektok River, Arolik River (A. Archibeque & R. MacD.), Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (RJ)(LJ), High Lake, Togiak Lake, Kemuk Creek (A. Archibeque photo), Togiak River, Four miles west of Cape Constantine, Kanakanak, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, L. Jemison, 1 Aug 89  
Cape Peirce, Rebecca Joyce, 18 Aug 85  
UA Mount: Kanektok River, P. Caswell, 28 Jul 92  
Kagati Lake, L. Hutson, 4 Jul 74  
Togiak Lake, M. Coffing, 19 Jul 79  
Cape Peirce, L. S. Dick, 16 Aug 70

Parnassia kotzebuei Cham. & Schlecht. Kotzebue Grass of Parnassus, Small Grass of Parnassus

Kagati Lake, Kanektok River (RM55 JC & JP), Arolik River (A. Archibeque & R. MacD.), Nimgun Creek, Cape Newenham (LH & LJ), High Lake, Nanavochtshak Lake, Togiak Lake (RJ), Pungokepuk Lake (JM & R. MacD.), Heart Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Togiak Lake, Rebecca Joyce, 15 Jul 85  
UA Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92  
Kagati Lake, L. Hutson, 4 Jul 74

GROSSULARIACEAE (Currant Family) (Hulten includes Ribes in SAXIFRAGACEAE)

Ribes hudsonianum Richards. Northern Black Currant

Togiak River

HH Specimen: Togiak River, P. Caswell, need date

Note: Specimen was sent to UA Museum in spring 1996.

Ribes glandulosum Grauer Skunk Currant

Igushik River

TNWR Mount: Dillingham, TNWR Bunkhouse, P. Caswell, 6 Jun 94  
(In bloom)  
Nushagak Peninsula - Igushik River, P. Caswell,

27 Jul 94 (In fruit)

UA Mount: Igushik River, P. Caswell, 27 Jul 94

Ribes laxiflorum Pursh Trailing Black Currant

Kanakanak

UA Mount: Kanakanak, O. W. Geist, 1933

ROSACEAE (Rose Family)

Spiraea stevenii (Schneid.) Rydb. Alaska Spiraea, Beauverd's Spiraea, Meadowsweet  
(Shown in Hulten as Spiraea Beauverdiana Schneid.)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce, High Lake, Nanavochtshak Lake, Togiak Lake (RJ)(BK), Pungokebuk Lake (JM & R. MacD.), Togiak River, Kikertalik Lake (WK), Tuklung Lake, Amanka Lake, Igushik River, Kanakanak, Heart Lake

Hulten indicates collections near Quinhagak, Cape Newenham and Kagati Lake.

TNWR Mount: Togiak Lake, B. Kaplin, 6 Jul 86  
Togiak Lake, Rebecca Joyce, 8 Jul 85  
Kikertalik Lake, W. Kirk, Sep 90 (det. S. Talbot) (2 mounts)  
UA Mount: Kagati Lake - central spit, S. Martin, 19 Jul 84  
Amanka Lake, M. S. Dickson, 16 Jul 77  
Cape Peirce, L. S. Dick, 15 Jul 70

Luetkea pectinata (Pursh) Ktze. Partridge Foot, Luetkea, Alpine Spiraea

High Lake, Nanavochtshak Lake

TNWR Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92  
UA Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92

Sorbus scopulina Greene Western Mountain Ash, Rowan Tree, Green Mountain Ash

Nanavochtshak Lake

TNWR Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92  
UA Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92

Rubus chamaemorus L. Cloudberry, Baked Apple

Kagati Lake (BK), Kanektok River, Arolik River (A. Archibeque & R. MacD.), Nimgun Lake, Cape Newenham (LH & LJ), Cape Peirce (LH)(LJ), High Lake, Nanavochtshak Lake, Togiak Lake (RJ), Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake (WK), Tuklung Lake (HJ), Igushik River, Snake River, Kanakanak,

## Heart Lake

Hulten indicates collections from Cape Newenham and Nushagak Peninsula. Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Kagati Lake, B. Kaplin, 29 Jun 86  
 Togiak Lake, Rebecca Joyce, 28 Jun 85  
 Kikertalik Lake, H. Johnson, 1994  
 Tuklung Lake, H. Johnson, Aug 93  
 UA Mount: Snake River - 24 km southwest of Dillingham, D. Mesiar,  
 10 Jun 79  
 Cape Peirce, L. S. Dick, 11 Jun 70  
 Kanakanak, O. W. Geist, 1933

Rubus arcticus L. Nagoonberry, Dwarf Raspberry, Kneshenaka

Kagati Lake (BK), Kanektok River, Nimgun Lake, Nimgun Creek, Cape Peirce, Cape Newenham (LH & LJ), Togiak River, Four miles west of Cape Constantine, Banding Lake (HJ), Kikertalik Lake, Igushik River, Kanakanak, Heart Lake, Milk Creek

Schandelmeier collected Rubus arcticus at Cape Peirce.

UA Mounts of Rubus arcticus (subspecies not listed):

Kanektok River - 5 km up from Quinhagak, D. Ashby, 18 Jun 83  
 Cape Peirce, P. Caswell, 4 Jul 92  
 Cape Peirce, L. S. Dick, 23 Jun 70

Rubus arcticus L. subsp. arcticus Nagoonberry, Dwarf Raspberry, Kneshenaka

Kagati Lake (BK), Arolik River (A. Archibeque & R. MacD.), Nimgun Lake, Nimgun Creek, Cape Peirce, Cape Newenham (LH & LJ), High Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake (HJ), Kikertalik Lake, Heart Lake, Milk Creek

Hulten indicates collection at Kagati Lake.

TNWR Mount: Kagati Lake, B. Kaplin, 26 Jun 86  
 Cape Peirce, Lisa Haggblom, 2 Jul 89  
 Banding Lake, H. Johnson, 1994 (2 mounts)  
 Nushagak Peninsula, H. Johnson, 1994

Rebecca Joyce mounted hybrids showing acaulis influence that she collected at Togiak Lake. Other specimens showing acaulis influence were found at Nimgun Creek, Kikertalik Lake and Heart Lake.

TNWR Mount: Togiak Lake, Rebecca Joyce, 14 Jul 85  
 Togiak Lake, Rebecca Joyce, 28 Jun 85

Rubus arcticus L. subsp. acaulis (Michx.) Focke Nagoonberry, Dwarf Raspberry, Kneshenaka  
 Banding Lake, Igushik River

TNWR Mount: Banding Lake, P. Caswell, 18 Jul 94

Rubus arcticus L. subsp. stellatus (Sm.) Boiv. emend. Hult. Nagoonberry, Dwarf Raspberry, Kneshenaka

(UA Museum calls this taxon Rubus stellatus Sm.)

Kanektok River (RM57), Cape Newenham, Cape Peirce, Tuklung Lake, Amanka Lake, Snake River, Heart Lake

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Tuklung Lake, P. Caswell, 22 Jul 94

UA Mount: Amanka Lake, M. S. Dickson, 22 Jun 77

Snake River area - 24 km southwest of Dillingham, D. Mesiar, 10 Jun 79

HH Specimen: Cape Peirce, P. Caswell, Jul 92

Comarum palustre L. Marsh Fivefinger, Swamp Cinquefoil

(Shown in Hulten as Potentilla palustris (L.) Scop.)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Goodnews Lake (RJ)(BK), Goodnews River, Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak Lake, Pungokebuk Lake (JM & R. MacD.), Togiak River, Lake Kikertalik, Four miles west of Cape Constantine, Banding Lake (WK), Tuklung Lake (HJ), Igushik River, Kanakanak, Shannon's Pond, Heart Lake

Hulten indicates collections at Goodnews, Cape Newenham and Kagati Lake.

TNWR Mount: Goodnews Lake, B. Kaplin, 21 Jul 86

Goodnews Lake, Rebecca Joyce, 3 Aug 85

Tuklung Lake, H. Johnson, no date recorded (2 mounts)

UA Mount: Pungokebuk Lake, J. Moran & R. MacDonald, 9 Jul 95

Cape Peirce, L. S. Dick, 24 Jul 70

Pentaphylloides floribunda (Pursh) A. Loeve Shrubby Cinquefoil, Tundra Rose, Yellow Rose

(Shown in Hulten as Potentilla fruticosa L.)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, High Lake, Togiak Lake (RJ), Kemuk Creek (A. Archibeque photo), Pungokebuk Lake (JM & R. MacD.), Togiak River, Kashaik Mountain, Heart Lake

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Togiak Lake, Rebecca Joyce, 5 Jul 85

UA Mount: Kagati Lake - central spit, S. Martin, 27 Jun 84

Togiak Lake, M. Coffing, 9 Jul 79

Potentilla biflora Willd. Cleft Leaved Cinquefoil

Kanektok River (RM57 JC & JP)

Hulten indicates collection near Cape Newenham.

TNWR Mount: Kanektok River (RM57), J. Culbertson, 27 Aug 95  
 UA Mount: Kanektok River (RM55), J. Culbertson and J.  
 Peirce, 21 Jun 95  
 HH Mount: Kanektok River (RM57), J. Culbertson, 27 Aug 95

Potentilla villosa Pall. Hairy Cinquefoil, Villous Cinquefoil

Cape Newenham (LH & LJ), Cape Peirce

Hulten indicates collection near Goodnews.  
 Reported by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Newenham, L. Haggblom and L. Jemison, 4 Jul 93  
 UA Mount: Cape Newenham, P. Caswell, 23 Jun 95  
 HH Mount: Cape Newenham, P. Caswell, 20 Jun 95

Potentilla uniflora Ledeb. Villous Cinquefoil, One-flowered Cinquefoil, Large Flowered Cinquefoil

Kagati Lake (BK), Kanektok River, Nimgun Lake, Nimgun Creek, Goodnews Lake (KN & SH), Cape Newenham, Cape Peirce (LH)(LJ), High Lake, Pond between Ongivinuck River and Pungokepuk Lake, Heart Lake

Hulten indicates collection at Cape Newenham.  
 Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Kagati Lake, B. Kaplin, 27 Jun 86  
 Cape Peirce, L. Jemison, 1 Jul 89 (two mounts)  
 UA Mount: Kagati Lake, P. Caswell, 24 Jun 92  
 Cape Peirce, L. S. Dick, 10 Jun 70

Potentilla nana Willd. ex Schlecht. Arctic Cinquefoil, Wild Sweet Potato  
 (Shown in Hulten as Potentilla hyparctica Malte)

Kagati Lake, Kanektok River (RM55 JC&JP), Nimgun Lake, Cape Newenham, Cape Peirce, Slug Mountain, High Lake, Ridge west of Sunshine Creek, Heart Lake

Lipkin records Potentilla hyparctica at Kagati Lake.

TNWR Mount: Kagati Lake, P. Caswell, 17 Jun 92  
 Cape Peirce, L. Jemison, 1989  
 UA Mount: Kagati Lake, P. Caswell, 17 Jun 92  
 Cape Newenham, P. Caswell, 20 Jun 95  
 Cape Peirce, L. S. Dick, 6 Jun 70

Potentilla norvegica L. subsp. monspeliensis (L.) Aschers. & Graebn. Rough Cinquefoil  
 Pond between Ongivinuck River and Pungokepuk Lake

TNWR Mount: Dillingham, P. Caswell, 14 Jul 95  
 UA Specimen: Pond between Ongivinuck River and Pungokepuk Lake, P. Caswell, 5 Aug 92

Potentilla hookeriana Lehm. subsp. hookeriana

Kagati Lake (Dr. Lipkin)

Recorded by Lipkin at Kagati Lake.

Argentina egedii (Wormsk.) Rydb. Silverweed  
 (Shown in Hulten as Potentilla Egedii Wormsk.)

Quinhagak beach, Cape Newenham, Cape Peirce, Four miles west of Cape Constantine, Igushik River

UA Mount (Subspecies not listed):  
 Cape Peirce - northeast shore of Nanvak Bay, L. S. Dick,  
 28 Jun 70

Argentina egedii (Wormsk.) Rydb. subsp. groenlandica (Tratt.) A. Loeve Silverweed, Small Pacific Silverweed  
 (Shown in Hulten as Potentilla Egedii Wormsk. subsp. Egedii var. groenlandica (Tratt.) Polunin)

Cape Newenham, Cape Peirce, Four miles west of Cape Constantine, Igushik River

Hulten indicates collections at Cape Newenham and near mouth of Snake River.  
 Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, P. Caswell, 3 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 11 Jul 92  
 (Listed as Potentilla Egedii subsp. Egedii)  
 HH Mount: Cape Peirce, P. Caswell, 3 Jul 92

Argentina egedii (Wormsk.) Rydb. subsp. egedii Pacific Silverweed, Beach Cinquefoil  
 (Shown in Hulten as Potentilla Egedii Wormsk. subsp. grandis (Torr. & Gray) Hult.)

Quinhagak beach, Cape Newenham, Cape Peirce (LH)

TNWR Mount: Cape Peirce, Lisa Haggblom, 26 Jul 89  
 HH Mount: Quinhagak beach, P. Caswell, 28 Jul 92

Sibbaldia procumbens L. Sibbaldia

Kagati Lake, Kanektok River (RM 48 JC & JP), Nimgun Lake, Cape Newenham, Cape Peirce, High Lake, Kashaik Mountain, Heart Lake

Recorded by Lipkin at Kagati Lake and Cape Newenham.

TNWR Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

UA Mount: Kashaiak Mountain, P. Caswell, 2 Aug 92  
Cape Peirce, L. S. Dick, 15 Jun 70

Geum macrophyllum Willd. var. macrophyllum

Kagati Lake (Dr. Lipkin)

Recorded by Lipkin at Kagati Lake.

Geum macrophyllum Willd. var. perincisum (Rydb.) Raup Large-leaved Avens  
(Shown in Hulten as Geum macrophyllum Willd. subsp. perincisum (Rydb.) Hult. UA  
Museum calls this taxon Geum perincisum Rydb.)

Togiak River, Sunshine Creek, Milk Creek

TNWR Mount: Togiak River, P. Caswell, 3 Aug 92  
(Lacks basal leaf)

UA Mount: Milk Creek, P. Caswell, 14 Aug 94

Geum rossii (R. Br.) Ser. Ross's Avens, Ross Avens  
(UA Museum calls this taxon Acomastylis rossii (R. Br.) Greene)

Kagati Lake, Kanektok River (RM55), Nimgun Lake, Nimgun Creek, Cape Newenham  
(LJ), Slug Mountain, High Lake, Nanavochtshak Lake, Kashaiak Mountain, Heart Lake

Collected by Dick (Schandelmeier) on Slug Mountain.

TNWR Mount: Cape Newenham, L. Jemison, 13 Jul 92

UA Mount: Slug Mountain, P. Caswell, 15 Jul 92

Geum glaciale J. E. Adams ex Fisch. Glacier Geum, Glacier Avens  
(UA Museum calls this taxon Novosieversia glacialis (J. Adams) F. Bolle.)

High Lake, Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 12 Aug 94

UA Mount: Heart Lake, P. Caswell, 5 Aug 94

Dryas octopetala L. Mountain Avens, Eight-petalled Dryas, Eight-petalled Mountain Dryas

UA Mount (Subspecies not listed):

Kagati Lake, S. Martin, 27 Jun 84

Kagati Lake, P. Caswell, 18 Jun 92

Cape Peirce, L. S. Dick, 11 Jun 70

Dryas octopetala L. subsp. octopetala var. octopetala Mountain Avens, Eight-petalled Dryas,  
Eight-petalled Mountain Dryas

Kanektok River (RM46, RM57)

TNWR Mount: Kanektok River (RM46), P. Caswell, 26 Aug 95

Dryas octopetala L. subsp. octopetala var. kamtschatica (Juz.) Hult. Mountain Avens, Eight-petalled Dryas, Eight-petalled Mountain Dryas

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Peirce (LJ)

Recorded by Lipkin at Kagati Lake.

Hulten indicates collections at Cape Newenham and near Dillingham.

TNWR Mount: Kagati Lake, P. Caswell, 18 Jun 92

HH Mount: Nimgun Lake, P. Caswell, 18 Jun 94

Dryas octopetala L. subsp. alaskensis (Pors.) Hult. Mountain Avens, Eight-petalled Dryas, Snow Mountain Dryas

(UA Museum calls this taxon Dryas alaskensis A. Pors.)

Kagati Lake (BK), Kanektok River, Nimgun Lake, Pyramid Mountain, Cape Newenham, Cape Peirce (A. Aderman), High Lake, Togiak River, Killian Ridge, Heart Lake

TNWR Mount: Kagati Lake, B. Kaplin, 22 Jun 86

UA Mount: Nimgun Lake, P. Caswell, 15 Jun 94

Dryas integrifolia M. Vahl subsp. integrifolia Entire-leaf Avens, Mountain Dryas

Kagati Lake, Cape Newenham (LH&LJ), Cape Peirce

TNWR Mount: Cape Peirce, L. Jemison, 1 Aug 89

UA Mount: Cape Peirce, P. Caswell, 4 Jul 92  
(UA did not list subspecies.)

Sanguisorba officinalis L. Common Burnet, Red Burnet, Official Burnet

Cape Newenham (LJ-92)

TNWR Mount: Cape Newenham, L. Jemison, 13 Jul 92

UA Mount: Cape Newenham, L. Jemison, 13 Jul 92

Sanguisorba canadensis L. Sitka Burnet, Greenish Burnet

(Shown in Hulten as Sanguisorba stipulata Raf.)

Kanektok River, Nimgun Lake, Nimgun Creek, Goodnews Lake (RJ), Goodnews River, Cape Newenham (LH & LJ), Cape Peirce, High Lake, Nanavochtshak Lake, Togiak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake (WK), Kikertalik Lake, Tuklung Lake (HJ), Igushik River, Heart Lake

Hulten indicates collections at Goodnews, Cape Newenham and Kagati Lake.  
Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Goodnews Lake, B. Kaplin, 18 Jul 86  
 Goodnews Lake, Rebecca Joyce, 3 Aug 85  
 Nushagak Peninsula, H. Johnson, Aug 93  
 Tuklung Lake, H. Johnson, Aug 93  
 UA Mount: Togiak Lake, M. Dick, 3 Aug 73  
 Cape Peirce, L. S. Dick, 7 Aug 70

Rosa acicularis Lindl. Prickly Rose

High Lake, Togiak River, Pond between Ongivinuck River and Pungokebuk Lake

UA Mount: Pond between Ongivinuck River and  
 Pungokebuk Lake, P. Caswell, 5 Aug 92  
 HH Mount: Togiak River between Kashaik and Kemuk  
 Rivers, J. Culbertson, 13 Jul 92

Rosa nutkana Presl Nootka Rose

Togiak River

TNWR Mount: Togiak River, vicinity of Kashaik Mountain, P. Caswell, 2 Aug 92  
 UA Mount: Togiak River, vicinity of Kashaik Mountain, P. Caswell, 2 Aug 92  
 HH Mount: Togiak River, vicinity of Kashaik Mountain, P. Caswell, 2 Aug 92

FABACEAE (Pea Family) (Shown in Hulten as Leguminosae)

Lupinus nootkatensis Donn Nootka Lupine

Kanektok River, Goodnews River, Cape Newenham, Cape Peirce (LH), High Lake,  
 Nanavochtshak Lake, Togiak Lake, Togiak River (RJ), Banding Lake (WK), Kikertalik  
 Lake, Tuklung Lake, Ridge west of Sunshine Creek

Hulten indicates collection at Cape Newenham.  
 Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, Lisa Haggblom, 1 Jul 89  
 Togiak Lake, Rebecca Joyce, 9 Jul 85  
 UA Mount: Cape Newenham, P. Caswell, 3 Jul 95  
 Cape Peirce, L. S. Dick, 22 Jun 70  
 Quinhagak, C. Heller, 7 Sep 51

Trifolium hybridum L. Alsike Clover

Kanakanak

TNWR Mount: Kanakanak, P. Caswell, 19 Aug 95  
 UA Mount: Kanakanak, P. Caswell, 19 Aug 95  
 HH Mount: Kanakanak, P. Caswell, 19 Aug 95

Astragalus umbellatus Bunge Hairy Milk Vetch, Tundra Milk Vetch

Kagati Lake (BK), Kanektok River (RM49, RD & AW), Nimgun Lake, Nimgun Creek,  
Cape Newenham, Cape Peirce, High Lake, Heart Lake

Hulten indicates collection near Goodnews.

TNWR Mount: Kagati Lake, B. Kaplin, 22 Jun 86  
UA Mount: Kanektok River (RM49), R. Doyle and A. Wheeler, 28 Jun 94  
Cape Peirce, L. S. Dick, 23 Jun 70

Astragalus alpinus L. var. alpinus Alpine Milk Vetch

(Shown in Hulten as Astragalus alpinus L. subsp. alpinus, Astragalus alpinus L. subsp. alaskanus Hult. and Astragalus alpinus L. subsp. arcticus (Bunge) Hult.)

Kagati Lake, Kanektok River, Goodnews River, Heart Lake

TNWR Mount: Kagati Lake, P. Caswell, 24 Jun 92  
UA Mounts of Astragalus alpinus:  
Kagati Lake, P. Caswell, 29 Jun 92  
Quinhagak, severa miles up Kanektok River, P. Caswell, 25 Jul 92  
Kanektok River, P. Caswell, 28 Jul 92  
Goodnews River, P. Caswell, 12 Jul 94

Astragalus polaris Benth. Polar Milk Vetch

Kanektok River (RM42)

TNWR Mount: Kanektok River (RM42), J. Culbertson and J. Peirce, 29 Jun 95  
(in flower)  
High Lake, P. Caswell, 4 Aug 95 (in fruit)  
UA Mount: High Lake, P. Caswell, 4 Aug 95  
HH Mount: High Lake, P. Caswell, 4 Aug 95

Oxytropis mertensiana Turcz. Merten's Oxytrope

Slug Mountain

TNWR Mount: Slug Mountain, P. Caswell, 15 Jul 92 (Was mounted at HH by  
accident - Caswell will send it back.)  
UA Mount: Slug Mountain, P. Caswell, 15 Jul 92  
HH Mount: Slug Mountain, P. Caswell, 15 Jul 92

Oxytropis maydelliana Trautv. Maydell's Oxytrope

Kagati Lake, Kanektok River (RM57), Nimgun Creek, Between Ongivinuck River and  
Pungokebuk Lake

TNWR Mount: Kagati Lake, P. Caswell, 24 Jun 92

UA Mount: Kagati Lake, P. Caswell, 24 Jun 92

Oxytropis nigrescens (Pallas) Fisch. ex DC. var. nigrescens Blackish Oxytrope, Blackish Crazyweed

(Shown in Hulten as Oxytropis nigrescens (Pall.) Fisch. subsp. bryophila (Greene) Hult. UA Museum calls this taxon Oxytropis bryophila (E. Greene) Yurtsev.)

Kagati Lake (BK), Kanektok River (RM49, RD & AW), Nimgun Lake, Nimgun Creek, Goodnews Lake (KN & SH), Pyramid Mountain, Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Kashaik Mountain, Ongivinuck Creek (JC & SH), Snake River, Killian Ridge, Ridge west of Sunshine Creek, Heart Lake

Lipkin records Oxytropis bryophila at Kagati Lake.  
Hulten indicates collection at Cape Newenham and Kagati Lake.

TNWR Mount: Cape Peirce, Lisa Haggblom, 18 Jun 89  
Kagati Lake, B. Kaplin, 22 Jun 86  
Nimgun Creek, P. Caswell, 16 Jun 94  
UA Mount: Kagati Lake vicinity, S. Martin, 27 Jun 84  
Snake River area - 24 km southwest of Dillingham, D. Mesiar, 10 Jun 79  
Nimgun Creek, P. Caswell, 16 Jun 94  
Cape Peirce, L. S. Dick, 3 Jun 70

Lathyrus japonicus Willd. Beach Pea

(Shown in Hulten as Lathyrus maritimus L.)

Quinhagak beach, Cape Newenham, Cape Peirce, Togiak Village beach, Four miles west of Cape Constantine, Kanakanak

UA Mounts of Lathyrus japonicus (subspecies not listed.)  
Togiak, O. W. Geist, 1933  
Snake River Mouth, K. Roberson, 27 Jun 65  
Quinhagak beach, P. Caswell, 28 Jul 92  
Cape Peirce, L. S. Dick, 22 Jun 70

Lathyrus japonicus Willd. var. maritimus (L.) Kartesz & Gandhi Beach Pea

(Shown in Hulten as Lathyrus maritimus L. subsp. maritimus)

Quinhagak beach, Cape Newenham, Cape Peirce (A. Aderman), Togiak

Reported by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Quinhagak beach, P. Caswell, 28 Jul 92  
HH Mount: Quinhagak beach, P. Caswell, 28 Jul 92

Lathyrus japonicus Willd. var. pubescens Hartman Beach Pea, Coastal Beach Pea

(Shown in Hulten as Lathyrus maritimus L. subsp. pubescens (Hartm.) C. Regel)

Quinhagak beach, Cape Newenham, Cape Peirce (LJ) (A white form was collected at Cape Peirce.), Four miles west of Cape Constantine, Kanakanak

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 3 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 3 Jul 92 (UA listed subspecies.)  
 HH Mount: Cape Peirce, P. Caswell, 4 Jul 92  
 (White form) Cape Peirce, P. Caswell, 3 Jul 92

Lathyrus palustris L. Vetchling, Wild Pea  
 (Subsp. pilosus (Cham.) Hult. is no longer recognized.)

Kanektok River, Togiak River, Four miles west of Cape Constantine, Igushik River, Kanakanak

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92  
 UA Mount: Togiak River, P. Caswell, 5 Aug 92

#### GERANIACEAE (Geranium Family)

Geranium erianthum DC. Wild Geranium, Northern Crane's Bill

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Newenham (a white form as well as the normal), Cape Peirce (RJ)(LH)(LJ), High Lake, Nanavochtshak Lake, Togiak Lake (BK), Kemuk Creek (A. Archibeque photo), Togiak River (RJ), Four miles west of Cape Constantine, Kikertalik Lake, Tuklung Lake, Amanka Lake, Igushik River, Kanakanak, Heart Lake

Hulten indicates collections at Goodnews, Cape Newenham and Kagati Lake. Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Togiak Lake, B. Kaplin, 6 Jul 86  
 Togiak Lake, Rebecca Joyce, 9 Jul 85  
 Cape Peirce, Rebecca Joyce, 18 Aug 85  
 UA Mount: Kagati Lake vicinity, S. Martin, 19 Jul 84  
 Kagati Lake, L. Hutson, 3 Jul 74  
 Togiak Lake, M. Coffing, 29 Jun 79  
 Amanka Lake, M. S. Dickson, 24 Jun 77  
 Cape Peirce, L. S. Dick, 29 Jun 70

#### CALLITRICHACEAE (Water Starwort Family)

Callitriche palustris L. Water Starwort  
 (Shown in Hulten as Callitriche verna L. emend. Loennr.)

Kanektok River, Nimgun Creek, Cape Peirce, Togiak River, Banding Lake

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92  
 UA Mount: Kanektok River, P. Caswell, 26 Jul 92

Callitriche heterophylla Pursh subsp. heterophylla Water Starwort  
 (Shown in Hulten as Callitriche anceps Fern.)

High Lake, Nanavochtshak Lake, Togiak River, Heart Lake

TNWR Mount: Togiak River, P. Caswell, 3 Aug 92  
 UA Mount: "Big Bend" in Togiak River, P. Caswell, 5 Aug 92

#### VIOLACEAE (Violet Family)

Viola biflora L. Two-flowered Violet, Two Color Violet

Kagati Lake, Kanektok River (RD & AW), Nimgun Lake, Nimgun Creek, Mountain lake south of Ungluayagat at Goodnews Lake (RJ), Cape Newenham (LJ-92), Cape Peirce, High Lake, Togiak River, Heart Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Mountain lake south of Ungluayagat at Goodnews Lake, Rebecca Joyce, 4 Aug 85  
 UA Mount: Cape Newenham, L. Jemison, 13 Jul 92  
 Cape Peirce, L. Schandelmeier, 25 Jun 70

Viola langsdoerffii Fisch. ex Gingins Alaska Violet

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Ungluayagat Mountain (KN & SH), Cape Newenham (LH & LJ), Cape Peirce, High Lake, Nanavochtshak Lake, Togiak Lake (RJ), Kashaik Mountain, Kikertalik Lake, Tuklung Lake

Recorded by Lipkin at Cape Newenham.  
 Hulten indicates collection at Cape Newenham.

TNWR Mount: Togiak Lake, Rebecca Joyce, 15 Jul 85  
 UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92  
 Cape Peirce, L. Schandelmeier, 21 Jun 70

Viola epipsila Ledeb. subsp. repens (Turcz.) Becker Marsh Violet

Kagati Lake, Kanektok River (RM55 JC & JP), Arolik River (A. Archibeque & R. MacD.), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Togiak Lake (RJ), Pungokepuk Creek (JC & PC), Heart Lake

TNWR Mount: Togiak Lake, Rebecca Joyce, 15 Jul 85  
 UA Mount: Cape Peirce, L. Schandelmeier, 31 May 70

Viola renifolia Gray White Violet  
 (Var. Brainerdii (Greene) Fern. is no longer recognized.)

Kagati Lake

UA Mount: Kagati Lake - gravel beach, L. Hutson, 4 Jul 74

ONAGRACEAE (Evening Primrose Family)

Epilobium angustifolium L. Fireweed

UA Mounts of Epilobium angustifolium (subspecies not listed):

Togiak, O. W. Geist, 1933

Snake River area - 24 km southwest of Dillingham, D. Mesiar, 26  
 Jul 79

Cape Peirce, L. S. Dick, 20 Aug 70

Epilobium angustifolium L. subsp. angustifolium Fireweed

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Togiak Lake, Togiak River, Banding Lake (HJ), Igushik River, Kanakanak, Shannon's Pond, Heart Lake

Hulten indicates collections near Kagati Lake and Kulukak Bay.

TNWR Mount: Banding Lake, H. Johnson, Aug 93

Epilobium angustifolium L. subsp. circumvagum Mosquin Fireweed, Robust Fireweed  
 (Shown in Hulten as Epilobium angustifolium L. subsp. macrophyllum (Hausk.) Hult.)

Kanektok River, Cape Newenham, Cape Peirce (LH)(LJ), High Lake, Togiak River, Banding Lake, Kikertalik Lake (WK), Tuklung Lake, Igushik River, Kanakanak, Heart Lake

Hulten indicates collections near Goodnews and Kulukak Bay.

Reported by Dick (Schandelmeier) at Cape Peirce.

Epilobium latifolium L. River Beauty, Dwarf Fireweed, Broad-leaved Fireweed, Beach Fireweed

Kagati Lake (BK), Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (LH), Slug Mountain, High Lake, Nanavochtshak Lake, Togiak Lake (RJ), Kemuk Creek (A. Archibeque photo), Kashaik Creek (a white form), Togiak River, Tuklung Lake, Heart Lake

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Kagati Lake, B. Kaplin, 22 Jun 86  
 Togiak Lake, Rebecca Joyce, 17 Jul 85  
 UA Mount: Kagati Lake, P. Caswell, 29 Jun 92  
 Kagati Lake, L. Hutson, 3 Jul 74  
 Cape Peirce, L. Schandelmeier, 15 Jul 70  
 Cape Peirce, L. S. Dick, 27 Jun 70  
 Kagati Lake, S. Martin, 19 Jul 84  
 Togiak Lake, M. Dick, 3 Aug 73  
 Togiak Lake, M. Coffing, 9 Jul 79  
 HH Mount: Kashaik Creek - two miles upstream from confluence with  
 Togiak River, a white form, J. Culbertson & S. Harper, 5 Jul 94

Epilobium luteum Pursh Yellow-flowered Willow Herb, Yellow Willow Herb

Togiak River

TNWR Mount: At "Big Bend" in Togiak River, P Chubb, Aug 94  
 UA Mount: At "Big Bend" in Togiak River, P. Caswell, 5 Aug 92

Epilobium palustre L. Swamp Willow Herb

Kanektok River, Quinhagak beach, Arolik River (A. Archibeque & R. MacD.), Nimgun  
 Creek, Cape Newenham, Cape Peirce, High Lake, Pungokepuk Creek, Togiak River,  
 Four miles west of Cape Constantine, Kikertalik Lake, Tuklung Lake, Igushik River,  
 Heart Lake

TNWR Mount: Kanektok River, P. Caswell, 27 Jul 92  
 UA Mount: Kanektok River, P. Caswell, 28 Jul 92  
 UA Specimen: Cape Newenham, P. Caswell, 1 Jul 95  
 Cape Newenham, P. Caswell, 29 Jun 95

Epilobium davuricum Fisch VERY TENTATIVE

High Lake

UA Specimen: High Lake, P. Caswell, 27 Jul 95

Epilobium anagallidifolium Lam. Alpine Willow Herb

Nimgun Creek, Mountain lake south of Ungluayagat at Goodnews Lake, Cape  
 Newenham, Cape Peirce, Slug Mountain, High Lake, Kashaik Mountain, Heart Lake

Recorded by Lipkin at Kagati Lake and Cape Newenham.  
 Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Mountain lake south of Ungluayagat at Goodnews Lake,  
 Rebecca Joyce, 4 Aug 85  
 UA Mount: Cape Peirce, P. Caswell, 10 Jul 92  
 Cape Peirce, L. S. Dick, 24 Jul 70

Epilobium ciliatum Raf. subsp. glandulosum (Lehm.) Hoch & Raven Glandular Willow Herb  
(Shown in Hulten as Epilobium glandulosum Lehm.)

Cape Newenham, Cape Peirce, High Lake, Togiak River, Kashaik Mountain,  
Nanavochtshak Lake, Togiak Lake, Pond between Ongivinuck River and Pungokepuk  
Lake, Kanakanak

TNWR Mount: Cape Peirce, Lisa Haggblom, 26 Jul 89  
Togiak River, P. Caswell, 5 Aug 92  
UA Mount: At "Big Bend" in Togiak River, P. Caswell  
5 Aug 92 (UA listed subspecies.)  
UA Specimen: Cape Newenham, P. Caswell, 8 Jul 95

Epilobium ciliatum Raf. subsp. ciliatum Northern Willow Herb  
(Shown in Hulten as Epilobium adenocaulon Haussk. UA Museum calls this taxon  
Epilobium ciliatum Raf. subsp. adenocaulon Hausskn.)

High Lake, Togiak River, Banding Lake (HJ), Kanakanak, Heart Lake

TNWR Mount: Togiak River, P. Caswell, 3 Aug 92  
Banding Lake, H. Johnson 1994 (2 mounts)  
UA Mount: Togiak River, P. Caswell, 3 Aug 92 (UA listed subspecies.)

Epilobium hornemannii Reichenb. Alpine Willow Herb

UA Mount (subspecies not listed):

Cape Peirce, L. S. Dick, 18 Jul 70

Epilobium hornemannii Reichenb. subsp. behringianum (Hausskn.) Hoch & Raven Alpine Willow  
Herb

(Shown in Hulten as Epilobium behringianum Haussk. and Epilobium sertulatum Haussk.)

Nimgun Creek, Cape Newenham, Kikertalik Lake, High Lake, Heart Lake

Lipkin records Epilobium hornemannii subsp. behringianum and Epilobium sertulatum at  
Cape Newenham.

Hulten indicates collection of Epilobium sertulatum at Cape Newenham and Kagati Lake.

TNWR Mount: Cape Newenham, P. Caswell, 29 Jun 95 (E. sertulatum)  
UA Specimen: Kikertalik Lake - Nushagak Peninsula, P. Caswell, 19 Jul  
94 (E. behringianum)  
Nimgun Creek, P. Caswell, 7 Jul 94 (E. sertulatum)  
Heart Lake, P. Caswell, 27 Jun 95 (E. sertulatum)  
Cape Newenham, P. Caswell, 24 Jun 95 (E. sertulatum)  
HH Mount: Cape Newenham, P. Caswell, 24 Jun 95 (E. sertulatum)

Epilobium hornemannii Reichenb. subsp. hornemannii Alpine Willow Herb

(Shown in Hulten as Epilobium Hornemannii Rchb.)

Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Kanakanak

Hulten indicates collection at Cape Newenham.

TNWR Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92

Cape Peirce, P. Caswell, 8 Jul 92

UA Mount: Cape Peirce, P. Caswell, 8 Jul 92 (UA listed  
subspecies.)

Nanavochtshak Lake, P. Caswell, 9 Aug 92 (UA  
listed subspecies.)

Circaea alpina L. Enchanter's Nightshade

Togiak Lake

UA Mount: Togiak Lake, P. Caswell, 10 Aug 92

HALORAGACEAE (Water Milfoil Family)

Myriophyllum sibiricum Komarov Water Milfoil

(Shown in Hulten as Myriophyllum spicatum L. subsp. exalbescens (Fern.) Hult. UA  
Museum calls this taxon Myriophyllum exalbescens Fern.)

Pond between Ongivinuck River and Pungokepuk Lake, Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 6 Aug 94

UA Mount: Pond between Ongivinuck River and Pungokepuk Lake, P.  
Caswell, 5 Aug 92

Hippuris vulgaris L. Mare's Tail, Common Maretail

Kagati Lake (BK), Kanektok River, Cape Newenham, Cape Peirce, Nanavochtshak Lake,  
Togiak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake, Tuklung  
Lake, Heart Lake

TNWR Mount: Kagati Lake, B. Kaplin, 8 Jul 86

Tuklung Lake, P. Caswell, 22 Jul 94

UA Mount: Cape Peirce - marsh ponds, L. Schandelmeier, 24 Aug 70

Hippuris tetraphylla L.f. Four-leaf Maretail

Quinhagak beach, Cape Newenham (Dr. Lipkin), Cape Peirce (RJ), Four miles west of  
Cape Constantine, Igushik River, Kanakanak

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Cape Peirce, Rebecca Joyce, 18 Aug 85  
 Nushagak Peninsula - Igushik River, P. Caswell, 26 Jul 94  
 UA Mount: Igushik River, P. Caswell, 26 Jul 94

APIACEAE (Shown in Hulten as UMBELLIFERAE) (Parsley Family)

Bupleurum americanum Coult. & Rose Thoroughwax, Thoroughwort  
 (Shown in Hulten as Bupleurum triradiatum Adams subsp. arcticum (Regel) Hult.)

Kagati Lake, Kanektok River (RM4I) (RM50 RD & AW), Nimgun Lake, Nimgun Creek,  
 Goodnews River (RM45 SH & KN), Heart Lake

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Kagati Lake, P. Caswell, 24 Jun 92  
 UA Mount: Kagati Lake, P. Caswell, 23 Jun 92

Cicuta virosa L. Mackenzie's Water Hemlock  
 (Shown in Hulten as Cicuta mackensieana Raup)

Quinhagak, Togiak River, Four miles west of Cape Constantine, Kikertalik Lake, Tuklung  
 Lake, Igushik River, Kanakanak, Shannon's Pond

TNWR Mount: "Big Bend" in Togiak River, P. Caswell, 5 Aug 92  
 UA Mount: "Big Bend" in Togiak River, P. Caswell, 5 Aug 92

Ligusticum scoticum L. subsp. hultenii (Fern.) Calder & Taylor Beach Lovage, Hulten's Sea-  
 lovage  
 (Spelled scoticum in Hulten.)

Quinhagak beach, Cape Newenham, Cape Peirce (LH), High Lake (tentative), Togiak  
 River, Togiak, Four miles west of Cape Constantine, Kikertalik Lake, Tuklung Lake,  
 Igushik River, Kanakanak

Hulten indicates collections near Goodnews and Kulukak Bay.

TNWR Mount: Quinhagak beach, P. Caswell, 28 Jul 92  
 UA Mount: Quinhagak beach, P. Caswell, 28 Jul 92  
 Cape Peirce - sand dunes, L. Schandelmeier, 19

Jul 70

Togiak, O. W. Geist, 1933  
 UA Spec: High Lake, P. Caswell, 19 Jul 95 (Very tentative- does not look  
 right.)

Podistera macounii (Coult. & Rose) Mathias & Constance Alpine Lovage  
 (Shown in Hulten as Ligusticum mutellinoides (Crantz) Willar subsp. alpinum (Ledeb.)  
 Thell.)

Kagati Lake, Kanektok River (RD & AW), Nimgun Lake, Nimgun Creek, Cape Newenham (LJ-92), Cape Peirce

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Kagati Lake, P. Caswell, 15 Jun 92  
 Kanektok River - about 50 miles upstream from Quinhagak, R. Doyle and A. Wheeler, 28 Jun 94  
 UA Mount: Cape Newenham, L. Jemison, 13 Jul 92  
 Cape Peirce, L. Schandelmeier, 18 Aug 70

Conioselinum gmelini (Cham. & Schlecht.) Steud. Hemlock Parsley, Western Hemlock Parsley (Shown in Hulten as Conioselinum chinense (L.) BSP. UA Museum calls this taxon Conioselinum pacificum (S. Wats.) J. Coulter & Rose. However, Kartesz shows the current synonym for Conioselinum pacificum to be Conioselinum gmelini (Cham. & Schlecht.) Steud. Kartesz shows the current synonym for Conioselinum chinense (L.) BSP. var. pacificum (S. Wats.) to be Conioselinum gmelini (Cham. & Schlecht.) Steud.)

Cape Newenham, Cape Peirce, Togiak Village, Kikertalik Lake, Tuklung Lake, Igushik River, Snake River, Kanakanak

Lipkin records Conioselinum pacificum at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 18 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 18 Jul 92  
 Snake River area, D. Mesiar, 26 Jul 79  
 HH Mount: Kikertalik Lake, P. Caswell, 20 Aug 92

Angelica lucida L. Angelica, Wild Celery, Seacoast Angelica

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak Lake, Togiak River, Banding Lake (HJ), Sunshine Creek, Kanakanak, Heart Lake

Hulten indicates collection at Cape Newenham and Kagati Lake.

TNWR Mount: Cape Newenham, L. Haggblom and L. Jemison, 4 Jul 93  
 UA Mount: Cape Peirce, L. Schandelmeier, 11 Aug 70

Angelica genuflexa Nutt. Drooping Wild Celery, Kneeling Angelica

Kanektok River, Cape Newenham, Cape Peirce, Nanavochtshak Lake, Togiak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak

Hulten indicates collection near Togiak village.

TNWR Mount: Togiak River - between 20 and 32 miles upriver from Togiak village, P. Caswell, 3 Aug 92

Heracleum maximum Bartr. Cow Parsnip, Wild Celery  
(Shown in Hulten as Heracleum lanatum Michx.)

Kagati Lake, Kanektok River (RM57), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Togiak Lake, Togiak River, Sunshine Creek, Heart Lake

TNWR Mount: Cape Peirce, P. Caswell, 11 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 11 Jul 92  
 Cape Peirce, L. Schandelmeier, 18 Jul 70  
 HH Mount: Cape Peirce, P. Caswell, 11 Jul 92

#### CORNACEAE (Dogwood Family)

Cornus suecica L. Swedish Dwarf Cornel, Swedish Cornel

Kagati Lake (BK), Kanektok River, Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake (HJ), Tuklung Lake, Igushik River, Kanakanak, Shannon's Pond, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Kagati Lake, B. Kaplin, 26 Jun 86  
 Cape Peirce, P. Caswell, 4 Jul 92  
 Kikertalik Lake, H. Johnson, 1994 (2 mounts)  
 UA Mount: Kagati Lake, P. Caswell, 18 Jun 92  
 Cape Peirce, L. Schandelmeier, 14 Jun 70

Cornus canadensis L. X suecica L.

Togiak Lake (RJ), Tuklung Lake (HJ)

TNWR Mount: Togiak Lake, Rebecca Joyce, 15 Jul 85

Note: This determination may be stretching it. Not really very sure about it. Its likely just C. suecica.

#### PYROLACEAE (Wintergreen Family)

Pyrola asarifolia Michx. subsp. asarifolia Pink-Flowered Wintergreen, Pink Pyrola, Liverleaf Wintergreen

(Shown in Hulten as Pyrola asarifolia Michx. var. asarifolia and Pyrola asarifolia Michx. var. purpurea (Bunge) Fern.)

Kagati Lake, Kanektok River (RM55 JC & JP), Goodnews River (RM43, 45, KN & SH), Cape Newenham, Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak River, Pond between Ongivinuck River and Pungokepuk Lake, Tuklung Lake, Igushik River,

## Heart Lake

Hulten indicates collection near Goodnews.

- TNWR Mount: Cape Peirce, Lisa Haggblom, 26 Jul 89  
Togiak River, J. Culbertson and S. Harper, 16 Jul 92 (Hulten's var. asarifolia)
- UA Mount: Cape Peirce, P. Caswell, 14 Jul 92  
Cape Peirce, L. Schandelmeier, 15 Jul 70  
Kagati Lake, L. Hutson, 4 Jul 74
- HH Mount: Heart Lake, P. Caswell, 7 Aug 94 (Hulten's var. asarifolia)

Pyrola grandiflora Radius Large-flowered Wintergreen, Arctic Wintergreen

Kagati Lake, Kanektok River, Cape Peirce, Pond between Ongivinuck River and Pungokepek Lake

- TNWR Mount: Kagati Lake, P. Caswell, 20 Jun 92
- UA Mount: Cape Peirce, P. Caswell, 4 Jul 92
- HH Mount: Cape Peirce, P. Caswell, 4 Jul 92

Pyrola minor L. Lesser Wintergreen, Little Wintergreen

Kanektok River (RM57), Nimgun Lake, Nimgun Creek, Mountain lake south of Ungluayagat at Goodnews Lake (RJ), Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Pond between Ongivinuck River and Pungokepek Lake, Banding Lake, Heart Lake

Hulten indicates collection at Kagati Lake.

- TNWR Mount: Mountain lake south of Ungluayagat at Goodnews Lake, Rebecca Joyce, 4 Aug 85
- UA Mount: Cape Peirce, P. Caswell, 8 Jul 92  
Cape Peirce, L. Schandelmeier, 16 Jul 70

Orthilia secunda (L.) House One-sided Pyrola, One-sided Wintergreen, Sidebells Pyrola, Sidebell Wintergreen

(Shown in Hulten as Pyrola secunda L. subsp. secunda and Pyrola secunda L. subsp. obtusata (Turcz.) Hult.)

Kagati Lake, Cape Peirce, High Lake, Nanavochtshak Lake, Heart Lake, Milk Creek

- TNWR Mount: Nanavochtshak Lake, P. Caswell, 10 Aug 92 (Hulten's subsp. secunda)  
Heart Lake, P. Caswell, 4 Aug 94 (Hulten's subsp. obtusata)
- UA Mount: Nanavochtshak Lake, P. Caswell, 10 Aug 92
- HH Mount: Heart Lake, P. Caswell, 5 Aug 94 (Hulten's subsp. obtusata)

## EMPETRACEAE (Crowberry Family)

Empetrum nigrum L. Curlewberry, Crowberry, Mossberry, Blackberry

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake (WK), Tuklung Lake (HJ), Igushik River, Kanakanak, Shannon's Pond, Killian Ridge, Heart Lake

TNWR Mount: Kikertalik Lake, W. Kirk, Aug 90 (det. D. Murray) (subspecies not listed)  
Tuklung Lake, W. Kirk, Aug 90 (det. D. Murray) (subspecies not listed)

UA Mount: Cape Peirce, L. Schandelmeier, 26 May 70  
Togiak, O. W. Geist, 1933

## ERICACEAE (Heath Family)

Ledum palustre L. subsp. decumbens (Ait.) Hult. Narrow Leaved Labrador Tea, Northern Labrador Tea

(Viereck and Little call this taxon Ledum decumbens (Ait.) Small.)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak Lake (RJ), Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Tuklung Lake (HJ), Igushik River, Snake River, Kanakanak, Heart Lake

Hulten indicates collections near Goodnews, Cape Newenham and Kagati Lake

TNWR Mount: Togiak Lake, Rebecca Joyce, 4 Jul 85  
Nushagak Peninsula, H. Johnson, Aug 93 (det. E. Maricheva)  
(Large leaves suggest a transition to L. groenlandicum.)

UA Mount: Cape Peirce, L. Schandelmeier, 21 Jun 70  
Kagati Lake, P. Caswell, 14 Jun 92 (UA listed subspecies.)  
Togiak Lake - 3 km south, M. Coffing, 1 Jul 79  
Snake River area - 24 km southwest of Dillingham, D. Mesiar, 12 Jun 79

Ledum groenlandicum Oeder Labrador Tea

(Shown in Hulten as Ledum palustre L. subsp. groenlandicum (Oeder) Hult.)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak River, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak

TNWR Mount: Kagati Lake, P. Caswell, 18 Jun 92  
UA Mount: Cape Peirce, P. Caswell, 3 Jul 92

Rhododendron camtschaticum Pall. subsp. camtschaticum Kamchatka  
Rhododendron

Cape Newenham (LH & LJ), Cape Peirce

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Cape Newenham, P. Caswell, 8 Jul 95  
Cape Newenham, P. Caswell, 24 Jun 95  
Cape Newenham, L. Haggblom and L. Jemison, 17 Jul 93  
UA Mount: Cape Peirce, L. Schandelmeier, 6 Jul 70  
Cape Newenham, P. Caswell, 8 Jul 95  
Cape Newenham, P. Caswell, 24 Jun 95

Loiseleuria procumbens (L.) Desv. Alpine Azalea

Kagati Lake (BK), Kanektok River (RM49), Nimgun Lake, Nimgun Creek, Pyramid Mountain, Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Kashaiaik Mountain, Kikertalik Lake (WK), Tuklung Lake, Igushik River, Heart Lake

Hulten indicates collections at Cape Newenham, Kagati Lake, Kulukak Bay and Nushagak Peninsula.

TNWR Mount: Cape Peirce, Lisa Haggblom, 17 Jun 89  
Kagati Lake, B. Kaplin, 22 Jun 86  
Kikertalik Lake, W. Kirk, Aug 90 (det. D. Murray)  
Kikertalik Lake, H. Johnson, no date recorded  
UA Mount: Kagati Lake, P. Caswell, 14 Jun 92  
Cape Peirce, L. Schandelmeier, 30 May 70

Phyllodoce coerulea (L.) Bab. Blue Mountain Heather

Kagati Lake (BK), High Lake, Nanavochtshak Lake, Heart Lake

Recorded by Lipkin at Kagati Lake.  
Hulten indicates collection at Kagati Lake.

TNWR Mount: Kagati Lake, B. Kaplin, 8 Jul 92  
UA Mount: Kagati Lake - mountains northeast of lake, P. Caswell, 24 Jun 92

Phyllodoce aleutica (Spreng.) Heller Aleutian Mountain Heather  
(Shown in Hulten as Phyllodoce aleutica (Spreng.) Heller subsp. aleutica)

South of Ungluayagat at Goodnews Lake (RJ), Cape Newenham, High Lake, Heart Lake

Lipkin records subsp. aleutica at Cape Newenham.  
Hulten indicates collection near Goodnews.

TNWR Mount: South of Ungluayagat at Goodnews Lake, Rebecca Joyce, 4 Aug 85

Phyllodoce aleutica x coerulea Hybrid

Kagati Lake (Dr. Lipkin)  
Recorded by R. Lipkin at Kagati Lake.

Harrimanella stellariana (Pallas) Coville Alaska Moss Heather  
(Shown in Hulten as Cassiope Stelleriana (Pall.) DC.)

Kagati Lake, Kanektok River (RM57), Nimgun Lake, Nimgun Creek, Mountain lake south of Ungluayagat at Goodnews Lake (RJ), Cape Newenham (LH & LJ), Cape Peirce, High Lake, Nanavochtshak Lake, Kashaik Mountain, Heart Lake

Lipkin records Cassiope stelleriana at Cape Newenham.  
Hulten indicates collection near Goodnews.

TNWR Mount: Mountain lake south of Ungluayagat at Goodnews Lake,  
Rebecca Joyce, 4 Aug 85

UA Mount: Kagati Lake - mountains northeast of lake, P. Caswell, 24 Jun 92

Cassiope lycopodioides (Pall.) D. Don Clubmoss Mountain Heather, Least Mountain Heather,  
Alaska Cassiope

Kagati Lake, Nimgun Lake, Cape Newenham, High Lake, Nanavochtshak Lake

Recorded by Lipkin at Kagati Lake.  
Hulten indicates collection at Cape Newenham.  
Collected by Dick (Schandelmeier) on Slug Mountain.

TNWR Mount: Nimgun Lake, P. Caswell, 17 Jun 94

UA Mount: Nanavochtshak Lake, P. Caswell, 9 Aug 92  
Cape Peirce, L. Schandelmeier, 28 Jul 70

Andromeda polifolia L. Bog Rosemary, Wild Rosemary

Kagati Lake (BK), Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Togiak River (RJ), Four miles west of Cape Constantine, Banding Lake (WK), Kikertalik Lake, Tuklung Lake, Igushik River, Kananak, Shannon's Pond, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Togiak River, Rebecca Joyce, 4 Jul 85

Kagati Lake, B. Kaplin, 12 Jul 92

Nushagak Peninsula, H. Johnson, Aug 93 (det. E. Maricheva)

UA Mount: Kagati Lake, P. Caswell, 15 Jun 92

Cape Peirce, L. Schandelmeier, 18 Jun 70

Igushik River - flood plain flats, K. Roberson, 27 Jun 67

Chamaedaphne calyculata (L.) Moench Cassandra, Leatherleaf

Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak

TNWR Mount: Lake Kikertalik, P. Caswell, 20 Aug 92  
 UA Mount: Igushik River - lower part, P. Caswell,  
 26 Jul 94

Arctostaphylos alpina (L.) Spreng. Alpine Bearberry  
 (UA Museum calls this taxon Arctous alpina (L.) Niedenzu.)

Kagati Lake, Kanektok River (RM41), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce (LH), High Lake, Kashaik Mountain, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak, Killian Ridge, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Kikertalik Lake, P. Caswell, 20 Aug 92  
 Tuklung Lake, H. Johnson, 1994  
 Kikertalik Lake, W. Kirk, Aug 90 (det. E. Maricheva)  
 UA Mount: Kagati Lake, P. Caswell, 22 Jun 92  
 Cape Peirce, L. Schandelmeier, 25 May 70

Vaccinium vitis-idaea L. subsp. minus (Lodd.) Hult. Lingonberry, Rock Cranberry, Mountain Cranberry, Low-bush Cranberry

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Pyramid Mountain, Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake (WK), Kikertalik Lake, Tuklung Lake (HJ), Igushik River, Snake River, Kanakanak, Shannon's Pond, Killian Ridge, Heart Lake

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Cape Peirce, Lisa Haggblom, 7 Jul 89  
 Banding Lake, W. Kirk, Aug 90 (det. D. Murray)  
 UA Mount: Kagati Lake, P. Caswell, 14 Jun 92  
 Cape Peirce, L. Schandelmeier, 21 Jun 70  
 Snake River area - 24 km southwest of Dillingham, D. Mesiar, 12 Jun 79

Vaccinium ovalifolium Sm. Early Blueberry

High Lake, Nanavochtshak Lake, Togiak River

Hulten indicates collection at Cape Newenham.

TNWR Mount: High Lake, P. Caswell, 2 Aug 95  
 UA Mount: High Lake, P. Caswell, 2 Aug 95  
 HH Mount: High Lake, P. Caswell, 2 Aug 95

Vaccinium uliginosum L. Alpine Blueberry, Bog Blueberry

(Hulten shows two subspecies, alpinum (Bigel.) Hult. and microphyllum Lange, which are no longer recognized.)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake, Tuklung Lake, Igushik River, Kanakanak, Heart Lake

TNWR Mount: Banding Lake, W. Kirk, Aug 90 (det. D. Murray)  
(2 mounts)

UA Mount: Kagati Lake, P. Caswell, 14 Jun 92  
Cape Peirce, L. Schandelmeier, 11 Jul 70

Specimens fitting Hulten's description of Vaccinium uliginosum L. subsp. microphyllum Lange were found at Banding Lake, Kikertalik Lake and Tuklung Lake. Hulten indicates collection near Goodnews.

TNWR Mount: Tuklung Lake, W. Kirk, 29 Aug 91  
HH Mount: Banding Lake, P. Caswell, 18 Jul 94

Vaccinium oxycoccus L. Bog Cranberry, Swamp Cranberry  
(Shown in Hulten as Oxycoccus microcarpus Turcz.)  
(Viereck and Little call this taxon Vaccinium oxycoccus L. At present others again call this taxon Oxycoccus microcarpus and reserve Vaccinium oxycoccus for the taxon shown in Hulten as Oxycoccus palustris Pers.)

Kagati Lake, Kanektok River (RM49), Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Togiak River, Four miles west of Cape Constantine, Banding Lake (WK), Kikertalik Lake (HJ), Tuklung Lake, Igushik River, Kanakanak, Shannon's Pond, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, P. Caswell, 7 Jul 92  
Banding Lake, H. Johnson, 1994 (2 mounts)  
UA Mount: Cape Peirce, P. Caswell, 17 Jun 92  
Cape Peirce, L. Schandelmeier, 28 Jun 70

#### DIAPENSIACEAE (Diapensia Family)

Diapensia lapponica L. var. obovata F. Schmidt Diapensia, Lapland Diapensia  
(Shown in Hulten as Diapensia lapponica L. subsp. obovata (F. Schm.) Hult.)

Kagati Lake, Kanektok River (RM49), Nimgun Lake, Nimgun Creek, Pyramid Mountain, Cape Newenham (LJ-92), Cape Peirce (LH)(LJ), High Lake, Kashaia Mountain, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, Lisa Haggblom and L. Jemison, 16 Jun 89  
 UA Mount: Kagati Lake, P. Caswell, 15 Jun 92  
 Cape Peirce, L. Schandelmeier, 31 May 70

PRIMULACEAE (Primrose Family)

Primula tschuktschorum Kjellm. Chukchi Primrose, "The Real Chukchi Primrose"  
 (Shown in Hulten as Primula tschuktschorum Kjellm. var. tschuktschorum)

Cape Newenham

TNWR Spec: Cape Newenham, P. Caswell, 26 Jun 95  
 UA Mount: Cape Newenham, L. Haggblom and L. Jemison,  
 23 Jun 93  
 Cape Newenham, P. Caswell, 7 Jul 95  
 Cape Newenham, P. Caswell, 21 Jun 95 (2 mounts)  
 Cape Newenham, P. Caswell, 23 Jun 95 (3 mounts)  
 Cape Newenham, P. Caswell, 26 Jun 95  
 Cape Newenham, P. Caswell, 5 Jul 95  
 HH Mount Cape Newenham, P. Caswell, 7 Jul 95

Primula eximia Greene "Eximia"  
 (Shown in Hulten as Primula tschuktschorum Kjellm. var. arctica (Koidz.) Fern.)

Kagati Lake, Kanektok River (RM55 JC & JP), Nimgun Lake, Nimgun Creek, Goodnews Lake (BK), Goodnews River (KN & SH), Cape Newenham, Cape Peirce (LJ), Heart Lake

Recorded by Lipkin at Kagati Lake.

Hulten indicates collections at Cape Newenham and near Quinhagak

TNWR Mount: Goodnews Lake, B. Kaplin, 21 Jul 86  
 Cape Peirce, L. Jemison, 16 Jun 89  
 UA Mount: Cape Peirce, P. Caswell, 6 Jul 92  
 Cape Peirce, P. Caswell, 4 Jul 92  
 Cape Peirce, L. Schandelmeier, 1970  
 Cape Peirce, L. Schandelmeier, 29 Jun 70  
 HH Mount: Kagati Lake, P. Caswell, 29 Jun 92

Primula cuneifolia Ledeb. var. saxifragifolia (Lehm.) Pax & R. Knuth Pixie Eyes, Wedge-leaved Primrose

(Shown in Hulten as Primula cuneifolia Ledeb. subsp. saxifragifolia (Lehm.) Sm. & Forrest)

Kagati Lake, Nimgun Creek, Goodnews Lake (KN & SH), Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake

Recorded by Lipkin at Cape Newenham.

Hulten indicates collections at Goodnews and Cape Newenham.

TNWR Mount: Cape Peirce, Lisa Haggblom, 8 Jun 89  
 UA Mount: Kagati Lake, P. Caswell, 24 Jun 92  
 Cape Peirce (West shore of Nanvak Bay), P. Caswell, 11 Jul 92  
 Cape Peirce, L. Schandelmeier, 27 Jun 70  
 Cape Newenham - below White Alice site, P. Caswell, 9 Jul 95  
 HH Mount: Cape Peirce (West shore of Nanvak Bay), P. Caswell, 11 Jul 92

Primula mistassinica Michx. Mistassini Primrose

Kanektok River (RM55 JC & JP), Nimgun Lake (Violet and white forms), Cape Peirce, Nanavochtshak Lake, Kashaik Mountain (white form)

TNWR Mount: Nimgun Lake, P. Caswell, 20 Jun 94  
 UA Mount: Kanektok River (RM45), P. Caswell, 26 Aug 95

Androsace chamaejasme Host subsp. Lehmanniana (Spreng.) Hult. Rock Jasmine, Sweet-flowered Androsace

Kagati Lake, Kanektok River (RD & AW), Nimgun Lake, Nimgun Creek, Goodnews Lake (KN & SH), Goodnews River (KN & SH), Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Ridge west of Sunshine Creek, Heart Lake

Hulten indicates collections at Goodnews and Cape Newenham.

TNWR Mount: Cape Peirce, Lisa Haggblom, 11 Jun 89  
 Ridge west of Sunshine Creek, P. Caswell, 4 Jun 94  
 UA Mount: Kagati Lake, P. Caswell, 15 Jun 92 (UA did not list subspecies.)  
 Cape Peirce, L. Schandelmeier, 15 Jun 70 and 7 Jun 73

Androsace septentrionalis L. Northern Jasmine

Kanektok River (lower part), Kanektok River (RM55 JC & JP)

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92  
 UA Mount: Quinhagak - several miles up the Kanektok River, P. Caswell, 26 Jul 92  
 HH Mount: Kanektok River, P. Caswell, 26 Jul 92

Douglasia alaskana (Coville & Standl. ex Hulten) S. Kelso Alaska Jasmine, Alpine Rock Jasmine (Shown in Hulten as Androsace alaskana Cov. & Standl.)

Kagati Lake (R. Lipkin), Kanektok River (RM57 JC & JP), Nimgun Lake, High Lake, Heart Lake  
 Recorded by Lipkin at Kagati Lake.

TNWR Mount: Heart Lake, P. Caswell, 5 Aug 94  
 UA Mount: Nimgun Lake, P. Caswell, 15 Jun 94

Dodecatheon frigidum Cham. & Schlecht. Northern Shooting Star, Mountain Shooting Star

Kagati Lake, High Lake, Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 5 Aug 94  
 UA Mount: Kagati Lake vicinity - Mt. Ata-ai-ach, S. Martin, 1 Jul 84  
 High Lake, P. Caswell, 18 Jul 95

Lysimachia thyrsiflora L. Tufted Loostripe

Togiak River (JC & SH)

TNWR Mount: Togiak River (RM25), pond on west side of river, J.  
 Culbertson and S. Harper, 1994  
 HH Mount: Togiak River (RM25), pond on west side of river, J.  
 Culbertson and S. Harper, 1994

Hartwick College donated their mount to UA Museum in spring 1996. UA Museum has not yet verified specimen nor entered it in their computer.

Trientalis europaea L. subsp. arctica (Fisch.) Hult. Starflower, Northern Starflower, Arctic Starflower

Kagati Lake (BK), Kanektok River, Arolik River (A. Archibeque & R. MacD.), Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Togiak Lake, Togiak River (RJ), Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Tuklung Lake (HJ), Igushik River, Snake River, Kanakanak, Heart Lake

Hulten indicates collections at Cape Newenham and Nushagak Peninsula.

TNWR Mount: Togiak River, Rebecca Joyce, 4 Jul 85  
 Togiak Lake, B. Kaplin, 4 Jul 86  
 Banding Lake, H. Johnson, Aug 93  
 UA Mounts of Trientalis europaea (subspecies not listed):  
 Kagati Lake, P. Caswell, 17 Jun 92  
 Togiak Lake, M. Coffing, 8 Jul 79  
 Kanektok River - 5 km above Quinhagak, D. Ashby,  
 10 Jun 83  
 Cape Peirce, L. Schandelmeier, 15 Jun 70  
 Snake River area - 24 km southwest of Dillingham, D. Mesiar, 10  
 Jun 79

PLUMBAGINACEAE (Leadwort Family)

Armeria maritima (P. Mill.) Willd. subsp. purpurea (W. D. J. Koch) A. & D. Loeve Thrift, Sea-pink  
 (Shown in Hulten as Armeria maritima (Mill.) Willd. subsp. arctica (Cham.) Hult.)

Kanektok River (JC & JP), Cape Newenham (LJ-92), Cape Peirce (LH), Banding Lake (WK)

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, Lisa Haggblom, 10 Jul 89  
 Banding Lake, W. Kirk, Oct 90 (det. S. Talbot)  
 UA Mount: Cape Peirce, P. Caswell, 7 Jul 92  
 Cape Peirce, L. Schandelmeier, 6 Jul 70  
 Cspe Peirce, L. S. Dick, 2 Jul 70  
 HH Mount: Cape Peirce, P. Caswell, 4 Jul 92

#### GENTIANACEAE (Gentian Family)

##### Gentiana algida Pall. White Gentian, Whitish Gentian

Kanektok River (RM57), Goodnews Lake (SH), Cape Newenham (LJ-92), Cape Peirce (RJ)(LJ), High Lake, Heart Lake

Recorded by Lipkin at Cape Newenham.  
 Hulten indicates collection near Togiak village.

TNWR Mount: Cape Peirce, Rebecca Joyce, 18 Aug 85  
 Cape Peirce, L. Jemison, 9 Aug 89  
 Heart Lake, P. Caswell, 12 Aug 94  
 UA Mount: Cape Peirce, L. Schandelmeier, 30 Jun 70  
 Cape Peirce, L. S. Dick, 18 Aug 70

##### Gentiana glauca Pall. Glauous Gentian

Kagati Lake, Kanektok River (RM57 JC & JP), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Kashaik Mountain, Heart Lake

Hulten indicates collection at Cape Newenham.  
 Collected by Dick at Cape Peirce and on Slug Mountain.

TNWR Mount: Cape Peirce, P. Caswell, 4 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 13 Jul 92  
 Cape Peirce, L. S. Dick, 22 Jul 70  
 Kagati Lake, S. Martin, 27 Jun 84

Gentianella amarella (L.) Boerner subsp. acuta (Michx.) J. Gillett Felwort, Northern  
 Gentian

(Shown in Hulten as Gentiana amarella L. subsp. acuta (Michx.) Hult. var. acuta and  
Gentiana amarella L. subsp. acuta (Michx.) Hult. var. plebeja (Cham. & Schlech.) Hult.)

Togiak River, Kanakanak

TNWR Mount: Togiak River, P. Caswell, 3 Aug 92

UA Mount: Togiak River - "Big Bend", P. Chubb, Aug 94  
Togiak River, P. Caswell, 3 Aug 92

Gentianella propinqua (Richardson) J. Gillett subsp. aleutica (Cham. & Schlecht.) J. Gillett.)  
(Shown in Hulten as Gentiana aleutica Cham. & Schlecht.)

Kanektok River

HH Mount: Kanektok River, P. Caswell, 26 Jul 92

Gentianella propinqua (Richardson) J. Gillett subsp. propinqua Four-parted Gentian  
(Shown in Hulten as Gentiana propinqua Richards. subsp. propinqua and Gentiana propinqua Richards. subsp. arctophila (Griseb.) Hult.)

Kanektok River (RM57), Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 8 Aug 94  
UA Mount: Heart Lake, P. Caswell, 6 Aug 94  
(UA did not list a subspecies.)  
HH Mount: Heart Lake, P. Caswell, 5 Aug 94

Lomatogonium rotatum (L.) E. Fries Star Gentian, Marsh Felwort

Five miles west of Cape Constantine

TNWR Mount: Five miles west of Cape Constantine, P. Caswell, 28 Jul 94  
UA Mount: Five miles west of Cape Constantine, P. Caswell, 28 Jul 94  
HH Mount: Five miles west of Cape Constantine, P. Caswell, 28 Jul 94

MENYANTHACEAE (Buckbean Family) (Hulten includes Menyanthes in the Gentianaceae)

Menyanthes trifoliata L. Buckbean

Cape Peirce (LJ), Togiak Lake (RJ), Togiak River, Four miles west of Cape Constantine,  
Banding Lake (HJ), Kikertalik Lake, Tuklung Lake, Igushik River, Kanakanak, Shannon's  
Pond

TNWR Mount: Togiak Lake, Rebecca Joyce, 5 Jul 85  
Banding Lake, H. Johnson, no date recorded  
UA Mount: Cape Peirce, P. Caswell, 4 Jul 92

POLEMONIACEAE (Polemonium Family)

Polemonium acutiflorum Willd. Tall Jacob's Ladder

Kagati Lake (BK), Kanektok River, Nimgun Lake, Nimgun Creek, Goodnews River, Cape  
Newenham (LH & LJ), Cape Peirce (LH), High Lake, Nanavochtshak Lake, Togiak Lake

(RJ), Togiak River, Four miles west of Cape Constantine, Banding Lake (HJ), Kikertalik Lake, Tuklung Lake (HJ), Igushik River, Snake River, Kanakanak, Heart Lake

Hulten indicates collections at Cape Newenham, Kagati Lake and near Togiak village.

TNWR Mount: Togiak Lake, Rebecca Joyce, 14 Jul 85  
Kagati Lake, B. Kaplin, 8 Jul 86  
Nushagak Peninsula, H. Johnson, Aug 93 (2  
mounts)  
Tuklung Lake, H. Johnson, Aug 93  
Banding Lake, H. Johnson, Aug 93  
UA Mount: Kagati Lake, P. Caswell, 20 Jun 92  
Cape Peirce, P. Caswell, 3 Jul 92  
Cape Peirce, L. S. Dick, 23 Jun 70  
Ualik Lake, K. Roberson, 1 Jul 65  
Kanektok River, 5 km above Quinhagak, D. Ashby, 1 Jul 83  
Snake River area, 25 km southwest of Dillingham, D. Mesiar, 10  
Jun 79  
Togiak River, M. Dick, 7 Aug 73

Polemonium boreale Adams subsp. boreale Northern Jacob's Ladder, Alpine Jacob's Ladder  
(Includes variety villosissimum Hult., which is no longer recognized.)

Cape Newenham, Cape Peirce, Kashaik Mountain

TNWR Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

Specimens fitting Hulten's description of Polemonium boreale Adams subsp. boreale var. villosissimum Hult. were collected on a terminal moraine (boulder field) in the cirque west of the north end of High Lake.

TNWR Mount: High Lake, P. Caswell, 25 Jul 95  
UA Mount: High Lake, P. Caswell, 25 Jul 95  
(UA Museum listed variety.)  
HH Mount: High Lake, P. Caswell, 25 Jul 95

Polemonium boreale Adams subsp. macranthum (Cham.) Hult. Northern Jacob's Ladder, Coastal Jacob's Ladder

Cape Peirce, Kashaik Mountain

HH Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

#### BORAGINACEAE (Borage Family)

Myosotis asiatica (Vesterg.) Schischkin & Sergievskaja Forget-Me-Not, Alpine Forget-Me-Not  
(Shown in Hulten as Myosotis alpestris F. W. Schmidt subsp. asiatica Vesterg.)

Kagati Lake, Nimgun Lake, Cape Newenham (LH & LJ), High Lake, Kashaik Mountain,

## Heart Lake

Hulten indicates collections near Goodnews and Kulukak Bay.

TNWR Mount: Cape Newenham, L. Haggblom and L. Jemison, 8 Jul 93  
 UA Mount: Kagati Lake - mountains northeast of lake, P. Caswell, 24 Jun 92

Mertensia maritima (L.) S. F. Gray var. maritima Oysterleaf  
 (Shown in Hulten as subsp. maritima)

Quinhagak beach, Cape Newenham, Nanvak Bay (LJ), Puffin Creek (white form), Togiak beach, Four miles west of Cape Constantine

Hulten indicates collection near Togiak village.  
 Collected by Dick (Schandelmeier) near Cape Peirce.

TNWR Mount: Cape Peirce - Nanvak Bay, P. Caswell, 6 Jul 92  
 Puffin Creek, P. Caswell, 12 Aug 95 (white)  
 UA Mount: Quinhagak beach, P. Caswell, 28 Jul 92  
 Togiak O. W. Geist, 1933  
 Puffin Creek, P. Caswell, 12 Aug 95 (white)  
 Cape Peirce, L. S. Dick, 22 Jun 70  
 HH Mount: Quinhagak beach, P. Caswell, 28 Jul 92

Mertensia paniculata (Ait.) G. Don Chiming Bells, Languid Lady, Tall Bluebell

UA Mounts (Subspecies not listed):  
 Nimgun Lake, P. Caswell, 25 Jun 94  
 Kanektok River, P. Caswell, 28 Jul 92  
 Togiak Lake, M. Dick, 3 Aug 73

UA Museum lists two mounts of Mertensia sp. These plants had extraordinarily broad leaves. Dr. Murray, C. Parker and A. Batten all had a good laugh and said that I had collected well fertilized specimens of Mertensia paniculata. Perhaps they were not as certain as I had thought, as they did not list the mounts as Mertensia paniculata. Perhaps they are just kind.

UA Mounts (Species not listed):  
 Nimgun Creek - Muddy bank between creek and beaver pond, P. Caswell, 6 Jul 94  
 Goodnews River - growing in gravel at base of a cut bank, P. Caswell, 10 Jul 94

Mertensia paniculata (Ait.) G. Don var. paniculata Lungwort, Chiming Bells, Languid Lady, Tall Bluebell

Kagati Lake (BK), Kanektok River, Nimgun Creek, Goodnews River, Togiak Lake (RJ), Kemuk Creek (A. Archibeque photo), Geshiak Lake (A. Aderman & R. MacD.), Togiak River

Hulten indicates collection near Goodnews.

TNWR Mount: Togiak Lake, Rebecca Joyce, 4 Jul 85  
 Kagati Lake, B. Kaplin, 26 Jun 86  
 Nimgun Creek, P. Caswell, 6 Jul 94

Mertensia paniculata (Ait.) G. Don var. eastwoodae (Macbr.) Hult. Lungwort, Chiming Bells,  
 Languid Lady, Eastwood's Bluebell

Nimgun Lake, Nimgun Creek, High Lake, Pungokepek Lake (JM & R. MacD.), Heart Lake

TNWR Mount: Nimgun Creek, P. Caswell, 30 Jun 94  
 UA Mount: Togiak River - near river - 3.2 km south of Togiak Lake, M.  
 Coffing, 29 Jun 79  
 (Listed as Mertensia eastwoodae J. F. Macbr.)

#### SOLANACEAE (Nightshade Family)

Solanum nigrum L. Nightshade, Black Nightshade

Lake Kikertalik

TNWR Mount: Lake Kikertalik, W. Kirk, Aug 90 (Det. A. Batten)

#### SCROPHULARIACEAE (Figwort Family)

Mimulus guttatus DC. Yellow Monkey Flower, Wild Snapdragon

Kanektok River (RM42) (RD & AW), Nimgun Creek, Goodnews River, Togiak River,  
 Heart Lake

TNWR Mount: Kanektok River, R. Doyle and A. Wheeler, 1994 (2 mounts)  
 UA Mount: Togiak River, M. Dick, 7 Aug 73

Limosella aquatica L. Mudwort

Kanektok River, Quinhagak beach

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92  
 UA Mount: Kanektok River, P. Caswell, 26 Jul 92

Veronica americana Schwein. Brooklime, American Speedwell

Togiak River, Igushik River

TNWR Mount: Nushagak Peninsula - Igushik River, P. Caswell, 26 Jul 94

UA Mount: Slightly upstream from "Big Bend" in Togiak River, P. Caswell, 13 Aug 92

Veronica serpyllifolia L. subsp. humifusa (Dickson) Syme Thyme-leaf Speedwell

Kanektok River (RM57), Nimgun Creek, Cape Newenham, Milk Creek

Hulten indicates collection at Cape Newenham.

TNWR Mount: Milk Creek, P. Caswell, 14 Aug 94

UA Mount: Nimgun Creek, P. Caswell, 4 Jul 94  
(UA listed subspecies.)

Veronica wormskjoldii Roemer & J. A. Schultes Alpine Speedwell, Alpine Veronica  
(Hulten shows two subspecies, Wormskjoldii and alterniflora (Fern.) Pennell, which are no longer recognized. Taxon includes Veronica Stelleri Pall. and its variety glabrescens Hult., which are no longer recognized. The plants below fitted Hulten's description of subsp. Wormskjoldii.)

Nimgun Creek, Cape Peirce, Slug Mountain, High Lake, Nanavochtshak Lake, Kashaik Mountain, Heart Lake

TNWR Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92  
Cape Peirce - near stream, L. Schandelmeier, 28 Jul 70

Lagotis glauca Gaertn. Weasel Snout, Lagotis  
(Shown in Hulten as Lagotis glauca Gaertn. subsp. glauca)

Kanektok River (RM49, RM55 JC & JP), Nimgun Lake, Cape Newenham, Cape Peirce (LH), Nanavochtshak Lake, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Nimgun Lake, P. Caswell, 26 Jun 94

UA Mount: Cape Peirce, L. Schandelmeier, 14 Jun 70  
(Listed as Lagotis glauca, but that could include L. minor. I left it under L. glauca, as that is the species I have seen at Cape Peirce.)

Lagotis minor (Willd.) Standl. Weasel Snout, Lagotis  
(Shown in Hulten as Lagotis glauca Gaertn. subsp. minor (Willd.) Hult.)

Kagati Lake (BK), Kanektok River (RM49), Nimgun Lake, Nimgun Creek, Cape Newenham, Heart Lake

TNWR Mount: Kagati Lake, B. Kaplin, 12 Jul 86

Castilleja elegans Malte Elegant Paintbrush, Elegant Indian Paintbrush, Purple Mountain Paintbrush

## Kagati Lake

Recorded by Lipkin at Kagati Lake.

TNWR Mount: Kagati Lake, P. Caswell, 24 Jun 92

UA Mount: Kagati Lake, P. Caswell, 24 Jun 92

Euphrasia mollis (Ledeb.) Wettst. Eyebright

Kanektok River (RM21), Cape Newenham (LJ-92), Cape Peirce (LH)(LJ), High Lake, Togiak River, Kashaik Mountain

TNWR Mount: Cape Peirce, Lisa Haggblom and L. Jemison, 1989

Cape Newenham, L. Jemison, 17 Aug 92

UA Mount: Ponds near "Big Bend" in Togiak River, P. Caswell, 13 Aug 92

Cape Peirce, L. Schandelmeier, 18 Aug 70

Rhinanthus minor L. subsp. groenlandicus (Ostenf.) L. Neum. Yellow Rattle, Rattlebox  
(Shown in Hulten as Rhinanthus minor L. subsp. borealis (Sterneck) Loeve)

Kanektok River, Goodnews Lake (RJ)(BK), Goodnews River, Nanavochtshak Lake, Togiak Lake, Pungokebuk Lake (JM & R. MacD.), Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Snake River, Kanakanak

Hulten indicates collection near Goodnews.

TNWR Mount: Goodnews Lake, B. Kaplin, 21 Jul 86

Goodnews Lake, Rebecca Joyce, 3 Aug 85

UA Mount: Kanektok River, P. Caswell, 26 Jul 92

Togiak Lake, M. Dick, 3 Aug 73

Snake River - 24 km southwest of Dillingham, D. Mesiar, 26 Jul 79

Pedicularis verticillata L. Whorled Lousewort, Bumble Bee Flower

Kagati Lake, Kanektok River, Arolik River (A. Archibeque & R. MacD.), Nimgun Lake, Nimgun Creek, Goodnews Lake (RJ)(BK), Cape Newenham (LH & LJ) (a white form as well as normal), Cape Peirce (RJ), High Lake, Nanavochtshak Lake, Togiak River, Kemuk Creek (A. Archibeque photo), Kikertalik Lake, Tuklung Lake, Heart Lake

Recorded by Lipkin at Cape Newenham.

Hulten indicates collections near Goodnews, Cape Newenham and Kagati Lake.

TNWR Mount: Goodnews Lake, B. Kaplin, 18 Jul 92

Goodnews Lake, Rebecca Joyce, 3 Aug 85

Mountain lake south of Ungluayagat at Goodnews Lake, Rebecca Joyce, 4 Aug 85

Cape Peirce, Rebecca Joyce, 18 Aug 85

UA Mount: Cape Peirce, P. Caswell, 13 Jul 92  
 Cape Peirce - Nanvak Bay, L. Schandelmeier, 28 Jun 70  
 Kagati Lake, L. Hutson, 4 Jul 74

Pedicularis labradorica Wirsing Labrador Lousewort

Kagati Lake, Kanektok River (RM57), Nimgun Lake, Nimgun Creek, Cape Peirce, Togiak Lake (BK), Kashaik Mountain, Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik River, Heart Lake

Hulten indicates collections near Goodnews and Kagati Lake.

TNWR Mount: Heart Lake, P. Caswell, 3 Aug 94  
 Togiak Lake, B. Kaplin, 6 Jul 86  
 UA Mount: Kagati Lake, P. Caswell, 29 Jun 92  
 Cape Peirce, L. Schandelmeier, 28 Jul 70  
 HH Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

Pedicularis parviflora J. E. Sm. subsp. Pennellii (Hult.) Hult. Purple Bog Lousewort

Kanektok River, Security Cove, Cape Peirce, Togiak River, Shannon's Pond

Hulten indicates collections near Goodnews and Quinhagak.

TNWR Mount: Cape Peirce, P. Caswell, 6 Jul 92  
 UA Mount: Kanektok River, P. Caswell, 29 Jul 92  
 (UA did not list subspecies.)

Pedicularis langsdorfii Fisch. ex Tev. subsp. arctica (R. Br.) Pennell Arctic Lousewort, Langsdorf Lousewort

(Shown in Hulten as Pedicularis Langsdorffii Fisch. subsp. arctica (R. Br.) Pennell)

Nimgun Lake, Cape Newenham, Cape Peirce, High Lake, Heart Lake

TNWR Mount: Nimgun Lake, P. Caswell, 17 Jun 94  
 UA Mount: Cape Peirce, L. Schandelmeier, 22 Jun 70

Pedicularis sudetica Willd. Sudeten Lousewort, Fernweed

Kagati Lake, Kanektok River, Quinhagak Beach, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce, High Lake, Kemuk Creek in Togiak Drainage (JC), Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Igushik River, Heart Lake

TNWR Mount of Pedicularis sudetica (subspecies not determined):  
 Lake Kikertalik, H. Johnson, no date recorded  
 UA Mounts of Pedicularis sudetica (subspecies not listed):  
 Cape Peirce, L. Schandelmeier, 23 Jul 70  
 Cape Peirce, P. Caswell, 7 Jul 92  
 Kagati Lake, L. Hutson, 4 Jul 74

Note: I have little confidence in my separation by subspecies. A sound conservative approach would be to lump them. However, I have heard that the AFlora of North America will treat each subspecies as a species.

Pedicularis sudetica Willd. subsp. interior Hult. Sudeten Lousewort, Fernweed

Kanektok River (RM57), Nimgun Creek, Cape Newenham (LH & LJ), High Lake, Togiak Lake (RJ), Banding Lake, Igushik River (A Kanektok River specimen, with a woolly inflorescence, is tentatively identified as this subspecies.)

Hulten indicates collection in or very near northeastern corner of refuge.

TNWR Mount: Togiak Lake, Rebecca Joyce, 15 Jul 85  
High Lake, P. Caswell, 20 Jul 95

Pedicularis sudetica Willd. subsp. pacifica Hult. Sudeten Lousewort, Fernweed

Kanektok River, Quinhagak beach, Cape Newenham, Cape Peirce (LH), Kemuk Creek in Togiak Drainage (JC), Banding Lake, Kikertalik Lake, Four miles west of Cape Constantine, Heart Lake (A Cape Newenham specimen with a woolly inflorescence is tentatively identified as this subspecies.)

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, Lisa Haggblom, 25 Jun 89

Pedicularis capitata Adams Capitate Lousewort

Kagati Lake (BK), Kanektok River (RM55 JC & JP), Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (LJ), High Lake, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, L. Jemison, 7 Jul 89  
UA Mount: Kagati Lake, P. Caswell, 28 Jun 92  
Cape Peirce, L. Schandelmeier, 22 Jun 70

Pedicularis oederi M. Vahl Oeder's Lousewort

Kanektok River (RM55 JC & JP), Nimgun Lake, Cape Newenham (LH & LJ) (common), Cape Peirce (LJ)

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Newenham, L. Haggblom and L. Jemison, 23 Jun 93  
UA Mount: Cape Peirce, P. Caswell, 4 Jul 92  
Cape Peirce, L. Schandelmeier, 24 Jun 70

Pedicularis lanata Cham. & Schlecht. subsp. lanata Woolly Lousewort  
(Shown in Hulten as Pedicularis Kanei Durand subsp. Kanei)

Kagati Lake (BK), Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce (LH), High Lake, Tuklung Lake, Igushik River, Snake River, Kanakanak, Killian Ridge, Ridge west of Sunshine Creek, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Kagati Lake, B. Kaplin, 27 Jun 86  
Cape Peirce, Lisa Haggblom, 9 Jun 89  
UA Mount: Kagati Lake, P. Caswell, 15 Jun 92  
Cape Peirce, L. Schandelmeier, 6 Jun 70  
Snake River area, D. Mesiar, 17 Jun 79  
Kanakanak, O. W. Geist, 1933  
Kanektok River - 5 km above Quinhagak, D. Ashby, 10 Jun 83

#### OROBANCHACEAE (Broomrape Family)

Boschniakia rossica (Cham. & Schlecht.) Fedtsch. Broomrape, Poque, Ground Cone, Cone Plant

Kanektok River (RD & AW), High Lake

TNWR Mount: Kanektok River, R. Doyle and A. Wheeler, 28 Jun 94

#### LENTIBULARIACEAE (Bladderwort Family)

Pinguicula villosa L. Hairy Butterwort, Bog Violet

Goodnew Lake (KN & SH), Togiak River one half mile south of Togiak Lake (RJ), Ongivinuck Creek (JC & SH)

TNWR Mount: Togiak River, Rebecca Joyce, 4 Jul 85  
UA Mount: Ongivinuck Creek - Four miles above confluence with Togiak River, J. Culbertson & S. Harper, 27 Jun 94

Utricularia macrorhiza Le Conte Common Bladderwort  
(Shown in Hulten as Utricularia vulgaris L. subsp. macrorhiza (Le Conte) Clausen)

Banding Lake

TNWR Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92  
UA Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92

Utricularia intermedia Hayne Flat-leaf Bladderwort

Togiak River, Banding Lake

TNWR Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92  
 UA Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92

Utricularia minor L. Lesser Bladderwort

Banding Lake

TNWR Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92  
 UA Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92  
 HH Mount: Cape Constantine (Banding Lake), P. Caswell, 21 Aug 92

PLANTAGINACEAE (Plantain Family)

Plantago major L. var. major Common Plantain

Lake Kikertalik

TNWR Mount: Lake Kikertalik, W. Kirk, Sep 90 (det. S. Talbot)

RUBIACEAE (Madder Family)

Galium boreale L. Bedstraw, Northern Bedstraw

Kagati Lake, Kanektok River, Arolik River (A., Archibeque & R. MacD.), Nimgun Creek, Goodnews Lake (RJ), Goodnews River, Cape Peirce, High Lake, Nanavochtshak Lake, Togiak Lake, Pungokebuk Lake (JM & R. MacD.), Togiak River, Banding Lake, Kikertalik Lake, Tuklung Lake, Killian Ridge, Heart Lake

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Goodnews Lake, Rebecca Joyce, 3 Aug 85  
 UA Mount: Kanektok River, P. Caswell, 27 Jul 92  
 Cape Peirce, L. Schandelmeier, 26 Aug 73  
 Cape Peirce, L. S. Dick, 26 Aug 73  
 Kagati Lake, L. Hutson, 3 Jul 74  
 Togiak Lake, M. Dick, 11 Aug 70

Galium trifidum L. subsp. trifidum Small Bedstraw, Sweet-scented Bedstraw  
 (Believe the Alaskan population of the former Galium Brandegei Gray may be included in this taxon.)

Cape Peirce, High Lake, Togiak River, Pungokebuk Lake (JM & R. MacD.), Four miles west of Cape Constantine, Tuklung Lake

TNWR Mount: Ponds near "Big Bend" in Togiak River, P. Caswell, 13 Aug 92 (2

mounts)  
 UA Mount: Cape Peirce, P. Caswell, 12 Jul 92 (UA listed subspecies.)

Galium Brandegei Gray Least Bedstraw

(I have listed this taxon separately as I am uncertain of its status. UA Museum still uses this name.)

Kanektok River, Quinhagak beach, Cape Peirce, Togiak River, Four miles west of Cape Constantine, Kanakanak

TNWR Spec: Quinhagak beach, P. Caswell, 30 Aug 95  
 UA Mount: Four miles west of Cape Constantine, P. Caswell, 29 Jul 94

CAPRIFOLIACEAE (Honeysuckle Family)

Sambucus racemosa L. subsp. pubens (Michx.) House var. arborescens Gray Red Elderberry, Pacific Red Elderberry

Kagati Lake, Kanektok River, Nimgun Creek, High Lake, Kikertalik Lake (WK), Ualik Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Kagati Lake, P. Caswell, 24 Jun 92  
 Kikertalik Lake, W. Kirk, no date (det. S. Talbot)  
 UA Mount: Kagati Lake, P. Caswell, 24 Jun 92  
 Kanektok River - 5 km up from Quinhagak, D. Ashby, 10 Jul 83  
 Ualik Lake, K. Roberson, 1 Jul 65

Viburnum edule (Michx.) Raf. High Bush Cranberry

Kagati Lake, Kanektok River, Nimgun Creek, High Lake, Nanavochtshak Lake, Togiak Lake, Togiak River, Kikertalik Lake, Heart Lake

Hulten indicates collection near Goodnews.

TNWR Mount: Kanektok River, P. Caswell, 27 Jul 92  
 UA Mount: Kanektok River, P. Caswell, 27 Jul 92  
 Togiak Lake, M. Dick, 3 Aug 73

Linnaea borealis L. Twinflower

Kagati Lake, High Lake, Nanavochtshak Lake, Kashaik Mountain, Pond between Ongivinuck River and Pungokebuk Lake, Tukklung Lake, Kanakanak, Heart Lake

UA Mount (Subspecies not listed):  
 Kashaik Mountain, P. Caswell, 2 Aug 72  
 Kanakanak, O. W. Geist, 1933

Linnaea borealis L. subsp. borealis Twinflower

Kagati Lake, High Lake, Nanavochtshak Lake, Kashaiak Mountain, Pond between Ongivinuck River and Pungokepuk Lake, Tuklung Lake, Heart Lake

Hulten indicates collection at Kagati Lake.

TNWR Mount: Pond between Ongivinuck River and Pungokepuk Lake, P. Caswell, 6 Aug 92

Linnaea borealis L. subsp. longiflora (Torr.) Hulten Twinflower  
(Shown in Hulten as Linnaea borealis L. subsp. americana (Forbes) Hult.)

High Lake

TNWR Mount: High Lake, P. Caswell, 19 Jul 95

#### ADOXACEAE (Moschatel Family)

Adoxa moschatellina L. Moschatel

Reported by Dick (Schandelmeier) on grassy slope near Kittiwake Arch and on the hillside above the marsh near the south shore of Nanvak Bay.

UA Mount: Cape Peirce - grassy area of upland tundra, L. S. Dick, 14 Jun 70

#### VALERIANACEAE (Valerian Family)

Valeriana capitata Pallas ex Link. Capitate Valerian, Mountain Heliotrope  
(Shown in Hulten as Valeriana capitata Pall. subsp. capitata)

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (LJ), High Lake, Nanavochtshak Lake, Togiak Lake (RJ)(BK), Togiak River, Kikertalik Lake, Heart Lake

Hulten indicates collection at Cape Newenham.

Collected by Dick at Cape Peirce.

TNWR Mount: Togiak Lake, B. Kaplin, 6 Jul 86  
Togiak Lake, Rebecca Joyce, 14 Jul 85

UA Mount: Cape Peirce, P. Caswell, 4 Jul 92  
Cape Peirce, L. S. Dick, 2 Jul 70  
Kanektok River - 5 km up, D. Ashby, 18 Jun 83  
Kagati Lake, L. Hutson, 3 Jul 74

#### CAMPANULACEAE (Bluebell Family)

Campanula lasiocarpa Cham. Bellflower, Alpine Harebell, Mountain Harebell  
(Hulten shows two subspecies, lasiocarpa and latisepala (Hult.) Hult., which are no longer recognized. This taxon includes taxon shown in Hulten as Campanula latisepala Hult. The specimens below fitted Hulten's description of subsp. lasiocarpa.)

Kagati Lake, Kanektok River (RM45, RD & AW)), Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (BK)(LJ), High Lake, Nanavochtshak Lake, Togiak Lake (RJ), Togiak River, Milk Creek, Heart Lake

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Togiak Lake, Rebecca Joyce, 17 Jul 85  
Cape Peirce, B. Kaplin, 20 Sep 86  
UA Mount: Cape Peirce, P. Caswell, 9 Jul 92  
Cape Peirce, L. S. Dick, 19 Jul 70

Campanula uniflora L. Arctic Harebell

Kanektok River (RM55 JC & JP), Nimgun Creek, Cape Peirce, Heart Lake

TNWR Mount: Cape Peirce, P. Caswell, 11 Jul 92  
UA Mount: Cape Peirce, P. Caswell, 9 Jul 92  
Heart Lake, P. Caswell, 5 Aug 94  
HH Mount: Cape Peirce, P. Caswell, 9 Jul 92

ASTERACEAE (Composite Family) (Shown in Hulten as COMPOSITAE)

Solidago multiradiata Ait. Northern Goldenrod, Mountain Goldenrod

Kagati Lake, Kanektok River, Arolik River (A. Archibeque & R. MacD.), Nimgun Creek, Goodnews Lake (RJ)(BK), Cape Newenham (LJ- 92), Cape Peirce (LJ), Slug Mountain, High Lake, Nanavochtshak Lake, Togiak Lake, Togiak River, Kashaik Mountain, Kikertalik Lake, Heart Lake

UA Mounts of Solidago multiradiata (variation not listed):  
Kagati Lake -central spit, S. Martin, 19 Jul 84  
Kagati Lake, L. Hutson, 3 Jul 74  
Togiak Lake - 3 km south of lake - near river, M. Coffing, 19 Jul 79  
Cape Peirce, L. Schandelmeier, 19 Jul 70  
Kagati Lake, P. Caswell, 24 Jun 92  
Arolik River, A. Archibeque and R. MacDonald, 20 Jul 95  
Cape Newenham, P. Caswell, 5 Jul 95

Solidago multiradiata Ait. var. multiradiata Northern Goldenrod, Mountain Goldenrod

Kagati Lake, Kanektok River, Arolik River (A. Archibeque & R. MacD.), Nimgun Creek, Cape Newenham, Cape Peirce (LJ), Slug Mountain, Goodnews Lake (RJ)(BK), High Lake, Nanavochtshak Lake, Togiak Lake, Togiak River, Kikertalik Lake, Heart Lake

TNWR Mount: Goodnews Lake, Rebecca Joyce, 3 Aug 85  
Goodnews Lake, B. Kaplin, 18 Jul 86

Solidago multiradiata Ait. var. arctica (DC.) Fern. Northern Goldenrod, Mountain Goldenrod, Arctic Goldenrod

Nimgun Creek, Cape Newenham (LJ-92), Cape Peirce, Kashaik Mountain

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Newenham, L. Jemison, 13 Jul 92

Aster alpinus L. var. vierhapperi (Onno) Cronq. Alpine Aster  
(Shown in Hulten as Aster alpinus L. subsp. Vierhapperi Ono)

Kanektok River (RM57 JC), Cape Peirce

TNWR Mount: Kanektok River (RM57), J. Culbertson, 27 Aug 95  
UA Specimen: Cape Peirce, P. Caswell, 9 Aug 95  
HH Mount: Cape Peirce, P. Caswell, 9 Aug 95

Aster sibiricus L. Siberian Aster

Kagati Lake, Kanektok River, Goodnews Lake (RJ), Goodnews River, Cape Newenham, Cape Peirce (RJ)(LJ), High Lake, Nanavochtshak Lake, Togiak Lake (BK), Kemuk Creek (A. Archibeque photo), Pungokebuk Lake (JM & R. MacD.), Togiak River, Heart Lake, Milk Creek

TNWR Mount: Goodnews Lake, Rebecca Joyce, 3 Aug 85  
Cape Peirce, Rebecca Joyce, 18 Aug 85  
Togiak Lake, B. Kaplin, 6 Jul 92  
UA Mount: Cape Peirce, P. Caswell, 4 Jul 92  
Kagati Lake, L. Hutson, 3 Jul 74  
Cape Peirce, L. Schandelmeier, 13 Jul 70  
Kagati Lake, S. Martin, 19 Jul 84  
Togiak Lake, M. Dick, 3 Aug 73  
Togiak Lake, M. Coffing, 9 Jul 79

Erigeron humilis Graham Fleabane, Mountain Fleabane, Snow Fleabane

High Lake, Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 12 Aug 94 (2 mounts)  
UA Mount: Heart Lake, P. Caswell, 10 Aug 94  
Heart Lake, P. Caswell, 4 Aug 94

Erigeron peregrinus (Pursh) Greene subsp. peregrinus Coastal Fleabane

Cape Newenham (LH & LJ), Cape Peirce, Slug Mountain

Lipkin records Erigeron peregrinus at Cape Newenham.

Hulten indicates collection at Cape Newenham.

Dick (Schandelmeier) collected Erigeron peregrinus near Cape Peirce.

TNWR Mount: Slug Mountain, P. Caswell, 15 Jul 92

UA Mount: Cape Peirce, P. Caswell, 17 Jul 92

HH Mount: Cape Peirce, P. Caswell, 17 Jul 92

Antennaria taxonomy has advanced since Hulten's "Flora of Alaska and Neighboring Territories" was published. Some of the taxa employed by Hulten are no longer considered valid. This list follows Kartesz except that subspecies of Antennaria monocephala and Antennaria friesiana are those employed by Randall J. Bayer in "A Taxonomic Revision of the Genus Antennaria of Alaska and Yukon Territory, Northwestern North America."

Antennaria friesiana (Trautv.) Ekman Pussytoes, Alpine Pussytoes

(Shown in Hulten as Antennaria Friesiana (Trautv.) Ekman subsp. Friesiana, Antennaria Friesiana (Trautv.) Ekman var. megacephala (Fern.) Hult., Antennaria Friesiana (Trautv.) Ekman subsp. alaskana (Malte) Hult, and Antennaria Friesiana (Trautv.) Ekman subsp. compacta (Malte) Hult.)

Note: Bayer's nomenclature differs from Kartesz's. Bayer considers populations lacking staminate plants to be Antennaria friesiana (Trautv.) Ekman subsp. friesiana. Bayer considers populations with staminate and pistillate plants present in equal

frequency to be Antennaria friesiana subsp. alaskana (Malte) Hult. Bayer also recognizes Antennaria friesiana subsp. nealaskana (A. E. Pors.) Bayer and Stebbins. For separation of these subspecies, the reader is referred to Bayer's "Key to Antennaria of Alaska and the Yukon Territory". I have followed Bayer's treatment of the subspecies.

Kagati Lake (BK), Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LJ-92), Cape Peirce, Slug Mountain, Togiak Lake (RJ), Kashaik Mountain, Heart Lake

UA Mounts of Antennaria friesiana (subspecies not listed):

Cape Peirce, L. Schandelmeier, 15 Jun 70

Kagati Lake, L. Hutson, 3 Jul 74

Kagati Lake, P. Caswell, 15 Jun 92

Antennaria friesiana (Trautv.) Ekman subsp. alaskana (Malte) Hult. Pussytoes, Alpine Pussytoes

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Goodnews Lake (KN & SH), Cape Newenham, Cape Peirce, Slug Mountain, Heart Lake

Hulten indicates collection at Cape Newenham and Kagati Lake.

Bayer indicates collection near Goodnews, Cape Peirce and Togiak village.

TNWR Mount: Kagati Lake, B. Kaplan, 27 Jun 86  
 Cape Newenham, L. Jemison, 13 Jul 92  
 Cape Peirce, P. Caswell, 7 Jul 92  
 HH Mount: Kagati Lake, P. Caswell, 14 Jun 92

Antennaria friesiana (Trautv.) Ekman subsp. friesiana Pussytoes, Alpine Pussytoes

Kagati Lake

Bayer indicates collection near Goodnews.

UA Mount: Kagati Lake, P. Caswell, 18 Jun 92 (UA listed subspecies.)

Antennaria monocephala DC. Single Headed Pussytoe, Cat's Paw  
 (Shown in Hulten as Antennaria monocephala DC. subsp. monocephala var. monocephala, Antennaria monocephala DC. subsp. monocephala var. exilis (Greene) Hult., Antennaria monocephala DC. subsp. philonipha (Pors.) Hult., and Antennaria monocephala DC. subs. angustata (Greene) Hult.)

Note: Bayer's nomenclature differs from Kartesz's. Bayer considers populations lacking staminate plants to be Antennaria monocephala DC. subsp. angustata (E. L. Greene) Hult. Bayer considers populations with staminate and pistillate plants present in equal frequency to be Antennaria monocephala DC. subsp. monocephala .

Kagati Lake, Kanektok River (RM55 JC & JP), Nimgun Lake, Nimgun Creek, High Lake, Nanavochtshak Lake (a form which keyed to subsp. philonipha in Hulten), Killian Ridge, Ridge west of Sunshine Creek, Heart Lake

UA Mounts of Antennaria monocephala (subspecies not listed):

Cape Peirce, L. Schandelmeier, 28 Jul 70

Kagati Lake, P. Caswell, 24 Jun 92

High Lake, P. Caswell, 19 Jul 95

High Lake, P. Caswell, 22 Jul 95

(UA listed Aall flowers pistillate@.)

Antennaria monocephala DC. subsp. monocephala Single Headed Pussytoe, Cat's Paw

Kagati Lake, Nimgun Lake, Nimgun Creek, High Lake, Killian Ridge, Ridge west of Sunshine Creek, Heart Lake

Bayer indicates collection near Cape Peirce and Togiak Village.

TNWR Spec: High Lake, P. Caswell, 27 Jul 95

Antennaria monocephala DC. subsp. angustata (Greene) Hult. Single Headed Pussytoe, Cat's Paw

High Lake

TNWR Spec: High Lake, P. Caswell, 18 Jun 95

Antennaria rosea E. L. Greene Pink Flowered Pussytoe

Kagati Lake, Kanektok River (RM63), Cape Peirce, High Lake, Togiak Lake, Kashaik Mountain, Heart Lake

TNWR Mount of Antennaria rosea (subspecies not determined):

Togiak Lake outlet - main island, R. Joyce, 15 Jul 85

Antennaria rosea E. L. Greene subsp. pulvinata (E. L. Greene) Bayer Pink Flowered Pussytoe

Kagati Lake, Cape Peirce, Kashaik Mountain, Heart Lake

Bayer indicates collection near Cape Peirce.

TNWR Mount: Heart Lake, P. Caswell, 4 Aug 94

Heart Lake, P. Caswell, 7 Aug 94

Gnaphalium uliginosum L. Cudweed

Togiak River (ponds west of River Ranger Camp)

TNWR Mount: Ponds near "Big Bend" in Togiak River, J. Culbertson and P. Caswell, 13 Aug 92

UA Mount: Ponds near "Big Bend" in Togiak River, J. Culbertson and P. Caswell, 13 Aug 92

HH Mount: Ponds near "Big Bend" in Togiak River, J. Culbertson and P. Caswell, 13 Aug 92

Achillea millefolium L. Common Yarrow

Kagati Lake

UA Mount: Kagati Lake - beach shore, L. Hutson, 3 Jul 71

Note: As Kartesz and "Anderson's Flora of Alaska" consider Achillea borealis to be a subspecies of A. millefolium, the plant Hutson collected at Kagati Lake is likely the native A. borealis listed below rather than an introduced weed.

Achillea millefolium L. var. borealis (Bong.) Farw. Yarrow, Boreal Yarrow, Milfoil  
(Shown in Hulten as Achillea borealis Bong.)

Kagati Lake, Kanektok River, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce, Nanavochtshak Lake, Togiak Lake (RJ)(BK), Kemuk Creek (A. Archibeque photo), Togiak River, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake, Tuklung Lake, Igushik Lake, Kakananak, Heart Lake. (A pink form was collected at Nimgun Creek, Cape Peirce, Four miles west of Cape Constantine and Heart Lake.)

Hulten indicates collection at Cape Newenham.

TNWR Mount: Togiak Lake, B. Kaplin, 6 Jul 86

Togiak Lake, Rebecca Joyce, 15 Jul 85

Heart Lake, P. Caswell, 3 Aug 94 (pink form)  
 Nushagak Peninsula, H. Johnson, Aug 93 (det. E. Maricheva)  
 UA Mount: Cape Peirce, P. Caswell, 16 Jul 92  
 Kagati Lake vicinity, S. Martin, 19 Jul 84  
 Cape Peirce - sand dunes, L. Schandelmeier, 19 Jul 70

Matricaria discoidea DC. Pineapple Weed

(Shown in Hulten as Matricaria matricarioides (Less.) Porter)

Quinhagak Airport, Quinhagak dump, Quinhagak beach, Goodnews Village, Cape Peirce,  
 Togiak Village, Kanakanak, Shannon's Pond

TNWR Mount: Quinhagak dump, P. Caswell, 27 Jul 92  
 UA Mount: Quinhagak dump, P. Caswell, 27 Jul 92

Tanacetum bipinnatum (L.) Schultz-Bip subsp. bipinnatum Chrysanthemum

(Shown in Hulten as Chrysanthemum bipinnatum L. subsp. bipinnatum)

Four miles west of Cape Constantine

TNWR Mount: Four miles west of Cape Constantine, P. Caswell and D. Albert,  
 29 Jul 94  
 UA Mount: Four miles west of Cape Constantine, P. Caswell and D. Albert,  
 29 Jul 94 (UA listed subspecies.)  
 HH Mount: Four miles west of Cape Constantine, P. Caswell and D. Albert,  
 29 Jul 94

Dendranthema arcticum (L.) Tzvelev subsp. polare (Hulten) Heywood Arctic Daisy

(Shown in Hulten as Chrysanthemum arcticum L. subsp. arcticum and Chrysanthemum arcticum L. subsp. polare Hult. TNWR specimens fitted Hulten's description of subsp. arcticum.)

Kanektok River, Quinhagak beach, Cape Newenham, Cape Peirce (LJ), Togiak River  
 (RM1, JC & SH), Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake,  
 Tuklung Lake, Igushik River

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, L. Jemison, 2 Jul 89  
 Banding Lake, Heather Johnson, Aug 93  
 UA Mount: Cape Peirce, L. Schandelmeier, 22 Jun 70  
 HH Mount: Cape Peirce, P. Caswell, 3 Jul 92  
 Kanektok River, P. Caswell, 26 Jul 92

Leucanthemum vulgare Lam. Marguerite, White Daisy

(Shown in Hulten as Chrysanthemum leucanthemum L.)

Kanakanak

TNWR Mount: Dillingham, P. Caswell, 13 Jul 95

UA Specimen: Dillingham, P. Caswell, 13 Jul 95  
 HH Mount: Dillingham, P. Caswell, 13 Jul 95

Artemisia globularia Bess. Purple Wormwood

Kagati Lake, Kanektok River (RM49, RD & AW), Nimgun Lake, Nimgun Creek, Mountain lake south of Ungluayagat at Goodnews Lake (RJ), Cape Newenham, Cape Peirce

Recorded by Lipkin at Kagati Lake and Cape Newenham.  
 Hulten indicates collection at Cape Newenham.

TNWR Mount: Mountain lake south of Ungluayagat at Goodnews Lake,  
 Rebecca Joyce, 4 Aug 85 (Two mounts)  
 UA Mount: Kagati Lake, P. Caswell, 19 Jun 92  
 Cape Peirce, M. Sigman, 12 Jul 76  
 Cape Peirce, L. Schandelmeier, 15 Jun 70

Artemisia glomerata Ledeb. var. subglabrata Hult.

Hulten collected variety subglabrata at Cape Newenham and Kagati Lake. Hulten described the variety from these specimens. In his description he named the variety subglabra. Variety subglabrata has never been found anywhere else in the world. In the "Flora of Alaska" Hulten misplots Kagati Lake north of Lake Nishlik.

In 1993 Dr. Rob Lipkin and Mary Beth Cook searched for the variety at Cape Newenham, Kagati Lake and other locations. They did not find it. Dr. Lipkin believes Hulten mistook pale Artemisia globularia specimens for a variety of Artemisia glomerata. See his "Status Report on Artemisia glomerata var. subglabra Hulten"

Artemisia tilesii Ledeb. Mountain Wormwood, Tall Wormwood, Dusty Miller

UA Mount (Subspecies not listed):  
 Kanektok River, P. Caswell, 26 Jul 92  
 Nanavochtshak Lake, P. Caswell, 9 Aug 92  
 Cape Peirce, L. Schandelmeier, 20 Aug 70  
 Togiak Lake, M. Dick, 3 Aug 73  
 Togiak, O. W. Geist, 1933

Artemisia tilesii Ledeb. subsp. tilesii Mountain Wormwood, Tall Wormwood, Dusty Miller

Nimgun Creek, Cape Peirce (LH), High Lake, Nanavochtshak Lake, Heart Lake

TNWR Mount: Nimgun Creek, P. Caswell, 30 Jun 94

Artemisia tilesii Ledeb. subsp. elatiior (Torr. & Gray) Hult. Mountain Wormwood, Tall Wormwood, Dusty Miller

Kanektok River, Cape Newenham (LH & LJ), Cape Peirce (LH), High Lake, Togiak River, Kikertalik Lake, Tuklung Lake, Kanakanak, Heart Lake (Grows in huge clumps below rookeries at Cape Peirce and Cape Newenham.)

Reported by Dick (Schandelmeier) near Cape Peirce.

TNWR Mount: Cape Peirce, Lisa Haggblom, 8 Aug 89

Artemisia tilesii Ledeb. subsp. gormanii (Rydb.) Hult. Mountain Wormwood, Tall Wormwood, Gorman's Wormwood

Kanektok River, Cape Newenham, Cape Peirce, Goodnews Lake (BK), High Lake, Kikertalik Lake, Kanakanak

TNWR Mount: Goodnews Lake, B. Kaplin, 31 Jul 92

Artemisia tilesii Ledeb. subsp. unalaschensis (Bess.) Hult. Mountain Wormwood

River Ranger Camp at Togiak River (Did not collect the plant as it was trampled.), Kanakanak

TNWR Mount: Kanakanak - beach, P. Caswell, 19 Aug 95

Artemisia arctica Less. subsp. arctica Arctic Wormwood

Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (RJ)(LH)(LJ), High Lake, Nanavochtshak Lake, Togiak River, Kashaiak Mountain, Kikertalik Lake, Tuklung Lake, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Peirce, Rebecca Joyce, 18 Aug 85  
Tuklung Lake, H. Johnson, 1994 (det. E.

Maricheva)

UA Mount: Kanektok River, P. Caswell, 29 Jul 92  
Cape Peirce, M. Sigman, 5 Aug 76  
Cape Peirce, L. Schandelmeier, 16 Jul 70

Petasites frigidus (L.) Franch. Arctic Sweet Coltsfoot, Frigid Coltsfoot

Kagati Lake, Kanektok River, Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce (LH)(LJ), High Lake, Togiak Lake, Togiak River, Banding Lake, Kikertalik Lake, Tuklung Lake (HJ), Kanakanak, Heart Lake

Hulten indicates collections at Cape Newenham and Kagati Lake.

TNWR Mount: Cape Peirce, Lisa Haggblom, 1 Jun 89  
Tuklung Lake, H. Johnson, 1994

UA Mount: Kagati Lake, P. Caswell, 17 Jun 92  
Cape Peirce, L. Schandelmeier, 21 Jun 70

Petasites frigidus (L.) Fries var. nivalis (Greene) Cronq. Arctic Sweet Coltsfoot, Northern Coltsfoot

(Shown in Hulten as Petasites hyperboreus Rydb. UA Museum calls this taxon Petasites nivalis.)

Nimgun Lake, Goodnews River, Cape Newenham (LH & LJ), Cape Peirce, High Lake, Four miles west of Cape Constantine, Banding Lake, Kikertalik Lake (WK), Tuklung Lake, Igushik River, Heart Lake

Hulten indicates collection at Cape Newenham.

TNWR Mount: Cape Newenham, L. Haggblom and L. Jemison, 6 Jul 93 (basal leaves lacking)  
Lake Kikertalik, W. Kirk, Aug 90 (det. A.Batten)  
UA Mount: Cape Peirce, P. Caswell, 11 Jul 92  
HH Mount: Cape Peirce, P. Caswell, 8 Jul 92

Arnica lessingii (Torr. & Gray) Greene Lessing's Arnica

(Shown in Hulten as Arnica Lessingii Greene subsp. Lessingii and Arnica Lessingii Greene subsp. Norbergii Hult. & Maguire. TNWR specimens fit Hulten's description of subsp. Lessingii.)

Kanektok River (RM48 JC & JP) (RM57), Arolik River (A. Archibeque and R. MacD.)  
Nimgun Lake, Nimgun Creek, Goodnews Lake (BK), Cape Newenham (LH & LJ), Cape Peirce (RJ), High Lake, Nanavochtshak Lake, Kashaik Mountain, Heart Lake

Recorded by Lipkin at Cape Newenham.

Hulten indicates collection at Cape Newenham.

TNWR Mount: Goodnews Lake, B. Kaplin, 21 Jul 86  
Cape Peirce, Rebecca Joyce, 18 Aug 85  
UA Mount: Kashaik Mountain, P. Caswell, 2 Aug 92  
Cape Peirce, L. Schandelmeier, 3 Jul 70

Arnica frigida C. A. Mey. ex Iljin subsp. frigida Lake Louise Arnica, Frigid Arnica

(Shown in Hulten as Arnica frigida C. A. Mey. UA Museum calls this taxon Arnica griscomii subsp. frigida.)

Kagati Lake, Kanektok River (RD & AW), Nimgun Lake, Nimgun Creek, Cape Newenham, Cape Peirce, High Lake, Kashaik Mountain, Pond between Ongivinuck River and Pungokepuk Creek, Togiak Lake (RJ), Togiak River, Heart Lake

Lipkin reprot's Arnica griscomii subsp. frigida at Kagati Lake.

Hulten indicates collection at Kagati Lake.

TNWR Mount: Togiak Lake, Rebecca Joyce, 17 Jul 85  
Togiak River - at spruce stand a few miles below Togiak Lake, P. Caswell, 11 Aug 92  
UA Mount: Togiak River - at spruce stand a few miles below Togiak Lake, P. Caswell, 11 Aug 92  
Cape Peirce, L. Schandelmeier, 1 Jul 70  
Kagati Lake vicinity, S. Martin, 27 Jun 84

(Listed as Arnica louiseana Farr subsp. frigida)

Arnica chamissonis Less. subsp. chamissonis Arnica

Kanektok River (RM58), Togiak River (near River Ranger Camp)

TNWR Mount: Togiak River, P. Caswell, 3 Aug 92  
 UA Mount: Togiak River, P. Caswell, 3 Aug 92 (two mounts)

Senecio congestus (R. Br.) DC. Marsh Fleabane, Mastodon Flower  
 (Hulten shows three varieties, congestus, palustris (L.) Fern. and tonsus Fern., which are no longer recognized.)

Kanektok River, Quinhagak beach, Togiak River, Four miles west of Cape Constantine, Banding Lake, Igushik River, Snake River. (Reaches river mile 49 on the Kanektok River and lower Ongivinuck Creek in the Togiak drainage.)

TNWR Mount: Kanektok River, P. Caswell, 26 Jul 92  
 UA Mount: Kanektok River, P. Caswell, 26 Jul 92  
 HH Mount: Quinhagak - Airport Road, P. Caswell, 28 Jul 92

Senecio atropurpureus (Ledeb.) Fedtsch. Groundsel, Purple Senecio  
 (Shown in Hulten as Senecio atropurpureus (Ledeb.) Fedtsch. subsp. frigidus (Richards.) Hult., Senecio atropurpureus (Ledeb.) Fedtsch. subsp. tomentosus (Kjellm.) Hult., Senecio atropurpureus (Ledeb.) Fedtsch. var. Ulmeri (Steffen) Pors., and Senecio atropurpureus (Ledeb.) Fedtsch. var. dentatus (Gray) Hult. Most TNWR specimens fit Hulten's description of subsp. frigidus.)

Lipkin records Senecio kjellmanii at Cape Newenham.

Specimens fitting Hulten's description of Senecio atropurpureus (Ledeb.) Fedtsch. subsp. frigidus (Richards.) Hult. were found at Kagati Lake, Nimgun Creek, Cape Newenham (LH & LJ), Cape Peirce (LH & LJ) and Togiak River.

Hulten indicates collection at Cape Newenham.

TNWR Mount: Kagati Lake, B. Kaplin, 29 Jun 86  
 Cape Peirce, L. Jemison, 24 Jun 89  
 Cape Peirce, P. Caswell, 5 Jul 92  
 UA Mount: Kagati Lake, P. Caswell, 20 Jun 92 (UA listed subspecies)  
 Cape Peirce, L. Schandelmeier, 11 Jun 70 (UA did not list subspecies, but Schandelmeier reported subspecies frigidus.)  
 HH Mount: Kagati Lake, P. Caswell, 19 Jun 92  
 Cape Newenham, L. Haggblom and L. Jemison, 25 Jun 93

Specimens fitting Hulten's description of Senecio atropurpureus (Ledeb.) Fedtsch. var. dentatus (Gray) Hult. were found at Cape Newenham.

TNWR Mount: Cape Newenham, P. Caswell, 19 Jun 95  
 UA Spec: Cape Newenham, P. Caswell, 15 Jun 95

Senecio cymbalaria Pursh Dwarf Arctic Butterweed  
(Shown in Hulten as Senecio resedifolius Less.)

Kagati Lake, Kanektok River (RD & AW), Nimgun Lake, Nimgun Creek, Goodnews River (RM49 KN & SH), Cape Newenham, Cape Peirce, High Lake, Togiak River, Heart Lake, Milk Creek

Lipkin records Senecio resedifolius at Kagati Lake and Cape Newenham.

Hulten indicates collection at Kagati Lake.

TNWR Mount: Cape Peirce, P. Caswell, 11 Jul 92  
 UA Mount: Cape Peirce, P. Caswell, 7 Jul 92  
 Cape Peirce, L. Schandelmeier, 6 Jul 70

Specimens fitting Hulten's description of Senecio resedifolius Less. f. columbiensis (Gray) Fern. were found at Nimgun Creek and High Lake.

TNWR Mount: Nimgun Creek, P. Caswell, 29 Jun 94

Senecio conterminus Greenm. Yellow Rock Senecio

Kanektok River (RM55 JC & JP) (RM46), Cape Newenham

Hulten indicates collection at Kagati Lake.

TNWR Mount: Kanektok River (RM46), P. Caswell, 26 Aug 95  
 UA Specimen: Cape Newenham, P. Caswell, 5 Jul 95  
 HH Mount: Cape Newenham, P. Caswell, 3 Jul 95

Senecio pseudoarnica Less. Seabeach Senecio, Seabeach Groundsel  
(Shown in Hulten as Senecio pseudo-Arnica Less.)

Quinhagak beach, Security Cove, Nanvak Bay, Togiak beach, Four miles west of Cape Constantine, Tuklung Lake, Igushik River

Hulten indicates collections at Goodnews and Cape Newenham.

TNWR Mount: Security Cove, P. Caswell, 3 Jul 95  
 UA Mount: Cape Peirce, L. Schandelmeier, 28 Jul 70  
 Togiak, O. W. Geist, 1933  
 HH Mount: Cape Peirce, P. Caswell, 18 Jul 92

Senecio lugens Richards. Black-tipped Groundsel

Heart Lake

TNWR Mount: Heart Lake, P. Caswell, 3 Aug 94  
 UA Mount: Heart Lake, P. Caswell, 4 Aug 94

Saussurea angustifolia (Willd.) DC. Narrow-leaf Saussurea

Kagati Lake, Kanektok River (RD & AW), Nimgun Creek, Heart Lake

UA Museum identified Jemison's specimen from Cape Newenham as Saussurea angustifolia. It appears to be the same plant as that listed below as Saussurea viscida. To some authors Saussurea viscida yukonensis is Saussurea angustifolia var. angustifolia, so likely there is no disagreement. In 1994 Caswell and Schubeck collected both "species" growing together above Nimgun Creek. Large numbers of both were totally interspersed among each other. Perhaps they really are very different forms of the same plant.)

TNWR Mount: Heart Lake, P. Caswell, 3 Aug 94  
 UA Mount: Cape Newenham - along south cliffs, L. Jemison, 17 Aug  
 Cape Peirce, L. Schandelmeier, 30 Jul 70

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Saussurea viscida Hulten Mountain Saussurea

(Shown in Hulten as Saussurea viscida Hult. var. yukonensis (Pors.) Hult.)

Nimgun Creek, Cape Newenham (LJ-92)(See above.), Cape Peirce (RJ) (LJ), Heart Lake

Reported by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, L. Jemison, 18 Jul 89  
 Cape Peirce, Rebecca Joyce, 18 Aug 85  
 HH Mount: Cape Peirce, P. Caswell, 12 Jul 92

Taraxacum officinale Weber Common Dandelion

Cape Newenham, Kanakanak

UA Specimen: Cape Newenham, P. Caswell, 23 Jun 95

Taraxacum officinale G. H. Weber ex Wiggers subsp. ceratophorum (Ledeb.) Schinz ex Thellung  
Horned Dandelion

(Shown in Hulten as Taraxacum ceratophorum (Ledeb.) DC., Taraxacum lacerum Greene, Taraxacum trigolobum Dahlstedt, and Taraxacum carneocoloratum Nels.)

Specimens fitting Hultens description of Taraxacum ceratophorum were found at Goodnews River (RM26 KN & SH), Cape Newenham and Cape Peirce

TNWR Mount: Cape Newenham, P. Caswell, 14 Jun 95  
 Goodnews Lake - south end, K. Nolan and S. Harper, 22 Jun 95  
 Cape Newenham, L. Haggblom and L. Jemison, 4 Jul 93  
 UA Mount (Listed as Taraxacum ceratophorum):  
 Cape Newenham, P. Caswell, 1 Jul 95  
 Cape Newenham, P. Caswell, 20 Jun 95  
 HH Mount: Cape Newenham, P. Caswell, 22 Jun 95

Cape Newenham, L. Haggblom and L. Jemison, 4 Jul 93 In  
Hulten's key, this specimen keys to Sect. CERATOPHORA  
(Other than those mentioned.)

Specimens fitting Hulten's description of Taraxacum trignolobum Dahlstedt were found at  
Cape Peirce and Togiak River

TNWR Mount: Cape Peirce, P. Caswell, 8 Jul 92  
UA Mount (Listed as Taraxacum trignolobum):  
Cape Peirce, P. Caswell, 8 Jul 92  
HH Mount: Cape Peirce, P. Caswell, 8 Jul 92  
Cape Peirce, P. Caswell, 4 Jul 92

Specimens fitting Hulten's description of Taraxacum carneocoloratum Nels. (Pink  
Dandelion, Pale Dandelion, Flesh-coloured Dandelion) were found at Heart Lake.

UA Mount (Listed as Taraxacum carneocoloratum Nels):

Heart Lake, K. Schubeck, 10 Aug 94

Taraxacum phymatocarpum J. Vahl Arctic Dandelion, Alaska Dandelion  
(Shown in Hulten as Taraxacum alaskanum Rydb. and Taraxacum hyparcticum  
Dahlstedt. TNWR specimens fitted Hulten's description of Taraxacum alaskanum .)  
TENTATIVE

LISTING

High Lake, Heart Lake

Reported by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Heart Lake, P. Caswell, 5 Aug 91

Note: Although I have listed this taxon, I was never able to convince UA Museum that I  
had found it. Likely I have not found it, but I am still not quite convinced. I sent UA  
Museum specimens from Cape Peirce, but they considered them to be Taraxacum  
kamtschaticum. In the spring of 1996, I sent UA Museum more specimens  
labeled Taraxacum alaskanum.

Taraxacum lyratum (Ledeb.) DC. Kamchatka Dandelion  
(Shown in Hulten as Taraxacum kamtschaticum Dahlstedt)

Kagati Lake, Kanektok River (RM48 JC & JP), Nimgun Lake, Nimgun Creek, Cape  
Newenham (Dr. Lipkin), Cape Peirce, High Lake, Kashaik Mountain, Heart Lake

Lipkin records Taraxacum kamtschaticum at Cape Newenham.  
Collected by Dick (Schandelmeier) at Cape Peirce.

TNWR Mount: Cape Peirce, P. Caswell, 8 Jul 92  
Cape Peirce, Lisa Haggblom, 2 Jul 89  
UA Mount: Cape Peirce, P. Caswell, 8 Jul 92

HH Mount: Kagati Lake, P. Caswell, 24 Jun 92  
Cape Peirce, P. Caswell, 8 Jul 92

Crepis nana Richards. subsp. nana Cushion Hawk's Beard, Dwarf Hawk's Beard, Little Hawk's Beard, Little Crepis

(Shown in Hulten as Crepis nana Richards. var. lyratifolia (Turcz.) Hult. and Crepis nana Richards. var. nana.)

Kagati Lake (R. Lipkin), High Lake, Heart Lake

Lipkin records Crepis nana var. nana at Kagati Lake.

Specimens at High Lake and Heart Lake fitted Hulten's description of var. lyratifolia.

TNWR Mount: Heart Lake, P. Caswell, 6 Aug 94

UA Spec: High Lake, P. Caswell, 25 Jul 95

Hieracium triste Willd. Woolly Hawkweed

Kanektok River (RM57), Cape Newenham, Cape Peirce, High Lake, Nanavochtshak Lake, Kashaik Mountain

Recorded by Lipkin at Cape Newenham.

TNWR Mount: Kashaik Mountain, P. Caswell, 2 Aug 92

UA Mount: Cape Peirce, P. Caswell, 17 Jul 92